

# OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

*Edited by*

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Secretary to the Commission

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## **OPINION 16**

The status, under rule (d) in Article 30, of a pre-binomial specific name, published prior to 1758, in relation to a generic name published on, or before, 31st December 1930

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# INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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## OPINION 16.

THE STATUS UNDER RULE (d) IN ARTICLE 30, OF A PRE-BINOMIAL SPECIFIC NAME, PUBLISHED PRIOR TO 1758, IN RELATION TO A GENERIC NAME PUBLISHED ON, OR BEFORE, 31ST DECEMBER 1930.

SUMMARY.—In deciding whether a case of absolute tautonymy is present (under rule (d) in Article 30), in relation to a generic name published on, or before, 31st December 1930,<sup>1</sup> the citation of a clear<sup>2</sup> pre-binomial specific name in synonymy is to be construed as complying with the demands of rule (d) in Article 30. Examples<sup>3</sup>: *Equus caballus* Linnaeus, 1758<sup>4</sup> (through “*Equus*” cited in synonymy in the sense of “the horse”) is the type of *Equus* Linnaeus, 1758<sup>4</sup>; *Alca torda* Linnaeus, 1758<sup>4</sup> (through “*Alca*” cited in synonymy in the sense of “the alca”) is the type of *Alca* Linnaeus, 1758.<sup>4</sup>

### I.—THE STATEMENT OF THE CASE.

The following case has been submitted by Dr. Stejneger for *Opinion* :—

Although I myself have very little doubt as to the correctness of applying Article 30, paragraph 1, litt. “*d*” of the International Code to the class of cases mentioned in this communication, I bring it to the attention of the Commission in order that a definite ruling may prevent misunderstandings and consequent deplorable instability and insecurity in the nomenclature of a large number of genera.

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<sup>1</sup> See NOTE 2 below (pp. 272–274).

<sup>2</sup> For a note on the special importance attaching to the expression “clear” as used in this sentence, see paragraph 20 below.

<sup>3</sup> When *Opinion* 16 was published in 1910, only the Linnean specific name and the equivalent pre-1758 uninominal specific name was cited in each of the examples given in the “summary” of this *Opinion*. Since those examples were inserted in the “summary” to illustrate cases where the types of genera were determined by absolute tautonymy through the citation in synonymy of pre-1758 tautonymous uninominal specific names, the relevant generic names (*Equus* Linnaeus, 1758, and *Alca* Linnaeus, 1758) have now been inserted for greater clarity.

<sup>4</sup> The author's name and the date of publication of this generic name were inadvertently omitted when this *Opinion* was published in 1910.

I allude to the numerous cases of Linnean species which among their cited synonyms have pre-Linnean <sup>5</sup> specific <sup>6</sup> names consisting of one word only. The question which has arisen is this: Does the citation of a non-binominal specific name *ipso facto* make the species to which it belongs the type of the genus having this name for its generic term; in other words, is such a species the "type by absolute tautonymy"?

To quote an example: The genus *Alca* was instituted by Linnaeus in 1758 (*Syst. Nat.* (ed. 10) 1:130). In order to ascertain its type by the aid of Article 30, we make sure, first, that there is no type by original designation (litt. "a"); second, that the word "*typicus*" or "*typus*" is not used (litt. "b"); third, that it is not monotypic (litt. "c"). Now the question arises: does the genus *Alca* contain among its original species one possessing the name "*Alca*" as its specific <sup>7</sup> name among the synonyms quoted? The very first species given by Linnaeus, viz., *Alca torda*, has the following synonymy quoted by him:—

*Alca* Clus. exot. 367. Worm. mus. 363. Will. om. 243, t. 64 f. 2. Raj. av. 119. Alb. av. 3. p. 90 t. 95.

The single name "*Alca*" as thus quoted is a SPECIFIC name <sup>8</sup> and not a generic name. It was first made a generic name by Linnaeus as here cited.

The case thus fits exactly litt. "d" of Article 30, and *Alca torda* "becomes *ipso facto* type of the genus," i.e. "by absolute tautonymy" as provided therein.

## II.—DISCUSSION OF THE CASE.

2. The question raised by Dr. Stejneger is an important one, which requires a careful study not only of the wording of the present Code but also of a number of the generic names used by Linnaeus, and the principles which induced him to adopt certain generic and certain specific names found in the tenth edition of the *Systema Naturae*. As examples of the Linnean generic names which come into consideration the following list may be studied:—

<sup>5</sup> The word "pre-Linnean" was here used as the equivalent of the expression "pre-1758," which would have been the more accurate term to employ in this context. See NOTE 3 to *Opinion 5* (pp. 118–119 above).

<sup>6</sup> As the pre-1758 names here referred to consist of a single word, the adjective "specific" is correctly applicable to them and not the adjective "trivial," which would have been the correct expression to apply to these names if they had been published (after 1757) as the second term of a specific name consisting of a binominal combination. See also footnote 7.

<sup>7</sup> Where rule (d) in Article 30 refers to a "specific name," the reference intended is to a binominal combination of a generic name and a trivial name (as required by Article 2 of the *Règles Internationales*). What constitutes "absolute tautonymy" in such cases is the use of the same word for (i) the generic name and (ii) the trivial name. Accordingly, in the present context, the adjective "trivial" should have been employed in place of the adjective "specific."

<sup>8</sup> See footnote 6.



Name of genus published by Linnaeus, 1758, Syst. Nat. (ed. 10) 1 and page reference		Name used by Linnaeus, 1758, for one of the species included in genus shown in column (1)	Name cited by Linnaeus in synonymy of species shown in column (3)	Type of genus shown in column (1), according to author shown in column (6)	
Name of genus	Page reference			Type of genus	Author by whom species shown in column (5) is regarded as type of genus (6)
(1)	(2)	(3)	(4)	(5)	(6)
<i>Simia</i> <sup>9</sup>	25	<i>S. sylvanus</i>	<i>Simia</i> Gesner	<i>S. satyrus</i>	Fleming, 1822 and Palmer 1904
<i>Vespertilio</i> <sup>10</sup>	32	<i>V. murinus</i>	<i>Vespertilio</i> Gesner	<i>V. murinus</i>	Palmer, 1904
<i>Phoca</i> <sup>11</sup>	37	<i>P. vitulina</i>	<i>Phoca</i> Gesner	<i>P. vitulina</i>	"
<i>Canis</i> <sup>10</sup>	38	<i>C. familiaris</i>	<i>Canis</i> Gesner	<i>C. familiaris</i>	"
<i>Felis</i> <sup>10</sup>	41	<i>F. catus</i>	<i>Felis</i>	<i>F. catus</i>	"
<i>Ursus</i> <sup>11</sup>	47	<i>U. arctos</i>	Aldrovandus <i>Ursus</i> Gesner	<i>U. arctos</i>	"
<i>Sus</i> <sup>11</sup>	49	<i>S. scrofa</i>	<i>Sus</i> Gesner	<i>S. scrofa</i>	"
<i>Talpa</i> <sup>11</sup>	52	<i>T. europaea</i>	<i>Talpa</i> Gesner	<i>T. europaea</i>	"
<i>Sorex</i> <sup>10</sup>	53	<i>S. araneus</i>	<i>Sorex</i>	<i>S. araneus</i>	"
<i>Rhinoceros</i> <sup>13</sup>	56	<i>R. unicornis</i>	Linnaeus <sup>12</sup> <i>Rhinoceros</i>	<i>R. unicornis</i>	"
<i>Hystrix</i> <sup>11</sup>	56	<i>H. cristata</i>	Jonstonus <sup>14</sup> <i>Hystrix</i> Gesner	<i>H. cristata</i>	"
<i>Lepus</i> <sup>10</sup>	57	<i>L. timidus</i>	<i>Lepus</i> Gesner	<i>L. timidus</i>	"
<i>Castor</i> <sup>11</sup>	58	<i>C. fiber</i>	<i>Castor</i> Gesner	<i>C. fiber</i>	"
<i>Mus</i> <sup>10, 15</sup>	59	<i>M. musculus</i>	<i>Mus</i> Gesner	<i>M. rattus</i>	"
<i>Sciurus</i> <sup>10</sup>	60	<i>S. vulgaris</i>	<i>Sciurus</i> Gesner	<i>S. vulgaris</i>	"
<i>Camelus</i> <sup>13, 16</sup>	65	<i>C. dromedarius</i>	<i>Camelus</i>	<i>C. dromedarius</i>	"
			Jonstonus, Gesner, Aldro- vandus <sup>17</sup>		
		<i>C. bactrianus</i>	<i>Camelus</i> Gesner	<i>C. bactrianus</i>	Gloger, 1842
<i>Cervus</i> <sup>10</sup>	66	<i>C. elaphas</i>	<i>Cervus</i> Gesner	<i>C. elaphas</i>	Palmer, 1904
<i>Capra</i> <sup>10</sup>	68	<i>C. hircus</i>	<i>Capra</i> Gesner	<i>C. hircus</i>	"
<i>Ovis</i> <sup>11</sup>	70	<i>O. aries</i>	<i>Ovis</i> Gesner	<i>O. aries</i>	"
<i>Bos</i> <sup>11</sup>	71	<i>B. taurus</i>	<i>Bos</i> Gesner	<i>B. taurus</i>	"
<i>Equus</i> <sup>13, 18</sup>	73	<i>E. caballus</i>	<i>Equus</i> Gesner	<i>E. caballus</i>	"
<i>Hippopotamus</i> <sup>11</sup>	74	<i>H. amphibius</i>	<i>Hippopotamus</i>	<i>H. amphibius</i>	"
			Bellonius <sup>14</sup>		
<i>Balaena</i> <sup>11</sup>	75	<i>B. mysticetus</i>	<i>Balaena</i>	<i>B. mysticetus</i>	"
			Willugby <sup>14</sup>		
<i>Delphinus</i> <sup>11</sup>	77	<i>D. delphis</i>	<i>Delphinus</i>	<i>D. delphis</i>	"
			Bellonius <sup>14</sup>		
<i>Vultur</i> <sup>13, 19</sup>	86	<i>V. papa</i>	<i>Vultur</i>	<i>V. gryphus</i>	Allen, 1907
			Albin <sup>14</sup>		
<i>Strix</i> <sup>13, 20</sup>	92	<i>S. stridula</i>	<i>Strix</i>	<i>S. stridula</i>	Fleming, 1822, apparently : Brisson, 1760, by tautonymy: Newton, 1872, de- finitely Allen
			Aldrovan- dus <sup>14</sup>		
<i>Corvus</i> <sup>13</sup>	105	<i>C. corax</i>	<i>Corvus</i> Gesner	<i>C. corax</i>	

<sup>9</sup> The name *Simia* Linnaeus, 1758, was later suppressed by the International Commission under their plenary powers in *Opinion* 114. See paragraphs 2 and 3 of NOTE 5 below (p. 280).

Name of genus published by Linnaeus, 1758, Syst. Nat. (ed. 10) 1 and page reference		Name used by Linnaeus, 1758, for one of the species included in genus shown in column (1)	Name cited by Linnaeus in synonymy of species shown in column (3)	Type of genus shown in column (1), according to author shown in column (6)	
Name of genus	Page reference			Type of genus	Author by whom species shown in column (5) is regarded as type of genus
(1)	(2)	(3)	(4)	(5)	(6)
<i>Cuculus</i> <sup>13</sup>	110	<i>C. canorus</i>	<i>Cuculus</i> Gesner	<i>C. canorus</i>	Allen
<i>Merops</i> <sup>13</sup>	117	<i>M. apiaster</i>	<i>Merops</i> Bellonius <sup>14</sup>	<i>M. apiaster</i>	Fleming, 1822 : Gray, 1840
<i>Upupa</i> <sup>13</sup>	117	<i>U. epops</i>	<i>Upupa</i> Linnaeus <sup>14, 21</sup>	<i>U. epops</i>	"
<i>Certhia</i> <sup>13</sup>	118	<i>C. familiaris</i>	<i>Certhia</i> Linnaeus <sup>14, 21</sup>	<i>C. familiaris</i>	Allen
<i>Anas</i> <sup>22</sup>	127	<i>A. boschas</i>	<i>Anas vera torquata minor</i> Gesner <sup>14</sup>	<i>A. boschas</i>	"
<i>Alca</i> <sup>13, 23</sup>	130	<i>A. torda</i>	<i>Alca</i> Clusius <sup>14</sup>	<i>A. torda</i>	"
<i>Pelecanus</i> <sup>13</sup>	132	<i>P. onocrotalus</i>	<i>Onocrotalus</i> s. <i>Pelecanus</i> Aldrovandus <sup>14</sup>	<i>P. onocrotalus</i>	"
<i>Sterna</i> <sup>13</sup>	137	<i>S. hirundo</i>	<i>Sterna</i> Gesner <sup>14</sup>	<i>S. hirundo</i>	Fleming, 1822 : Gray, 1840
<i>Scolopax</i> <sup>13</sup>	145	<i>S. rusticola</i>	<i>Scolopax</i> Aldrovandus <sup>14</sup>	<i>S. rusticola</i>	Allen
<i>Tringa</i> <sup>13</sup>	148	<i>T. ocropus</i>	<i>Tringa</i> Aldrovandus <sup>14</sup>	<i>T. canutus</i>	"
<i>Charadrius</i> <sup>13, 24</sup>	150	<i>C. hiaticula</i>	<i>Charadrius</i> s. <i>Hiaticula</i> Aldrovandus <sup>14</sup>	<i>C. africanus</i>	"
		<i>C. oediconemus</i>	<i>Charadrius</i> Gesner		
<i>Fulica</i> <sup>13</sup>	152	<i>F. atra</i>	<i>Fulica</i> Bellonius <sup>14</sup>	<i>F. atra</i>	"
<i>Otis</i> <sup>13</sup>	154	<i>O. tarda</i>	<i>Otis</i> s. <i>tarda</i> avis Rajus <sup>14</sup>	<i>O. tarda</i>	Fleming, 1822 : Gray, 1840
<i>Struthio</i> <sup>22</sup>	155	<i>S. camelus</i>	<i>Struthio-camelus</i> Aldrovandus <sup>14</sup>	<i>S. camelus</i>	Fleming, 1822 : Gray, 1840
<i>Pavo</i> <sup>13</sup>	156	<i>P. cristatus</i>	<i>Pavo</i> Gesner <sup>14</sup>	<i>P. cristatus</i>	"
<i>Meleagris</i> <sup>13</sup>	156	<i>M. gallopavo</i>	<i>Meleagris</i> Linnaeus <sup>12, 14</sup>	<i>M. gallopavo</i>	Allen
<i>Phasianus</i> <sup>13</sup>	158	<i>P. colchicus</i>	<i>Phasianus</i> Rajus <sup>14</sup>	<i>P. colchicus</i>	Fleming, 1822 : Gray, 1840
<i>Tetrao</i> <sup>13</sup>	159	<i>T. tetrix</i>	<i>Tetrao</i> Gesner <sup>14</sup>	<i>T. tetrix</i>	Fleming, 1822
<i>Sturnus</i> <sup>22</sup>	167	<i>S. vulgaris</i>	<i>Sturnus</i> Gesner <sup>14</sup>	<i>S. vulgaris</i>	Allen

Name of genus published by Linnaeus, 1758, Syst. Nat. (ed. 10) 1 and page reference		Name used by Linnaeus, 1758, for one of the species included in genus shown in column (1)	Name cited by Linnaeus in synonymy of species shown in column (3)	Type of genus shown in column (1), according to author shown in column (6)	
Name of genus	Page reference			Type of genus	Author by whom species shown in column (5) is regarded as type of genus
(1)	(2)	(3)	(4)	(5)	(6)
<i>Loxia</i> <sup>13</sup>	171	<i>L. curvirostra</i>	<i>Loxia</i> Gesner <sup>14</sup>	<i>L. curvirostra</i>	Allen
<i>Fringilla</i> <sup>13</sup>	179	<i>F. coelebs</i>	<i>Fringilla</i> Gesner <sup>14</sup>	<i>F. coelebs</i>	Fleming, 1822 : Gray, 1840
<i>Motacilla</i> <sup>13</sup>	184	<i>M. alba</i>	<i>Motacilla</i> Gesner <sup>14</sup>	<i>M. alba</i>	Allen
<i>Caprimulgus</i> <sup>13</sup>	193	<i>C. europaeus</i>	<i>Caprimulgus</i> Bellonius <sup>14</sup>	<i>C. europaeus</i>	Gray, 1840
<i>Chimaera</i> <sup>25</sup>	236	<i>C. monstrosa</i>	<i>Chimaera</i> Linnaeus <sup>14, 26</sup>	<i>C. monstrosa</i>	Fleming, 1822 : Jordan & Evermann
<i>Acipenser</i> <sup>25</sup>	237	<i>A. sturio</i>	<i>Acipenser</i> Linnaeus <sup>14, 27</sup>	<i>A. sturio</i>	Fleming, 1822 : Jordan & Evermann
<i>Gymnotus</i> <sup>13</sup>	246	<i>G. carapo</i>	<i>Gymnotus</i> Linnaeus <sup>14, 26</sup>	<i>G. carapo</i>	Gill
<i>Stromateus</i> <sup>13</sup>	248	<i>S. fiatola</i>	<i>Stromateus</i> Artedi <sup>14</sup>	<i>S. fiatola</i>	"
<i>Cyclopterus</i> <sup>25</sup>	260	<i>C. lumpus</i>	<i>Cyclopterus</i> Linnaeus <sup>14, 28</sup>	<i>C. lumpus</i>	Jordan & Evermann
<i>Echeneis</i> <sup>29</sup>	260	<i>E. remora</i>	<i>Echeneis</i> Linnaeus, Artedi, and Gronovius <sup>14</sup>	<i>E. remora</i>	Gill, 1864, but not 1862 : not Jordan & Evermann
<i>Silurus</i> <sup>25</sup>	304	<i>S. glanis</i>	<i>Silurus</i> Linnaeus <sup>14, 30</sup>	—	—
<i>Pulex</i> <sup>31</sup>	614	<i>P. irritans</i>	<i>Pulex</i> Linnaeus <sup>12, 14</sup>	<i>P. irritans</i>	Baker
<i>Gordius</i> <sup>32</sup>	647	<i>G. aquaticus</i>	<i>Gordius</i> Linnaeus <sup>14, 33</sup>	<i>G. aquaticus</i>	Fleming, 1822 : Stiles & Hassall
<i>Holothuria</i> <sup>34</sup>	657	<i>H. physalis</i>	<i>Holothuria</i> Rumphinis <sup>14</sup>	<i>H. physalis</i>	Gill, 1907
<i>Sepia</i> <sup>35, 36</sup>	658	<i>S. officinalis</i>	<i>Sepia</i> Linnaeus <sup>14, 37</sup>	—	—
<i>Taenia</i> <sup>36</sup>	819	<i>T. vulgaris</i>	<i>Taenia</i> Schenk	<i>T. solium</i>	Braun : Stiles
Compare also :— <i>Chaos</i> Linnaeus, 1767, Syst. Nat. (ed. 12) 1 (2) : 1074, 1326 <sup>39</sup>		<i>C. protheus</i> Linnaeus, 1767, Syst. Nat. (ed. 12) 1 (2) : 1326	<i>Volvox chaos</i> Linnaeus, 1758, Syst. Nat. (ed. 10) 1 : 821	<i>V. chaos</i> Linnaeus, 1758, Syst. Nat. (ed. 10) 1 : 821	Stiles & Hassall

<sup>10</sup> This name was later placed on the *Official List of Generic Names in Zoology* by *Opinion* 91. See paragraph 4 of *NOTE* 4 below (p. 278).

<sup>11</sup> This name was later placed on the *Official List of Generic Names in Zoology* by *Opinion* 75. See paragraph 4 of NOTE 4 below (p. 278).

<sup>12</sup> This reference is to the 1st edition of the *Fauna svecica* of Linnaeus published in 1746.

<sup>13</sup> See paragraphs 7 and 8 of NOTE 4 below (pp. 279–280).

<sup>14</sup> The name of this author was inadvertently omitted from this table when *Opinion* 16 was published in 1910.

<sup>15</sup> See paragraphs 4–9 of NOTE 5 below (pp. 281–282).

<sup>16</sup> See paragraphs 10–14 of NOTE 5 below (pp. 282–283).

<sup>17</sup> When *Opinion* 16 was published in 1910, only the name of Gesner was here cited; this was misleading, since Gesner was only the second of three authorities cited by Linnaeus for this use of the name "*Camelus*."

<sup>18</sup> As recorded in the "summary" of *Opinion* 16, the Commission have decided that *Equus caballus* Linnaeus, 1758, is the type of *Equus* Linnaeus, 1758.

<sup>19</sup> See paragraphs 15–17 of NOTE 5 below (p. 284).

<sup>20</sup> See paragraphs 22–24 of NOTE 5 below (pp. 285–286).

<sup>21</sup> The reference is to the 1st edition of the *Fauna svecica* of Linnaeus published in 1746. Linnaeus gave supplementary references to Bellonius, Gesner, Aldrovandi, Jonstonus, Willugby, Rajus, Albin, etc.

<sup>22</sup> This name was later placed on the *Official List of Generic Names in Zoology* by *Opinion* 67. See paragraph 4 of NOTE 4 below (p. 278).

<sup>23</sup> As recorded in the "summary" of *Opinion* 16, the Commission have decided that *Alca torda* Linnaeus, 1758, is the type of *Alca* Linnaeus, 1758.

<sup>24</sup> See paragraphs 18–21 of NOTE 5 below (pp. 284–285).

<sup>25</sup> This name was later placed on the *Official List of Generic Names in Zoology* by *Opinion* 77. See paragraph 4 of NOTE 4 below (p. 278).

<sup>26</sup> The reference is to the *Museum S.R.M. Adolphi Friderici Regis* of Linnaeus published in 1754.

<sup>27</sup> The reference is to the so-called *Iter Scanicum* of Linnaeus published in 1751 under the title "Skånska Resa . . . Förrättad år 1749."

<sup>28</sup> Linnaeus cited two references, the first to the 1st edition of his *Fauna svecica* (1746), the second to the *Iter Scanicum* (1751). See footnote 27 for the full title of the last-named work.

<sup>29</sup> This name was later placed on the *Official List of Generic Names in Zoology* by *Opinion* 92 but with an incorrect type. See NOTE 6 below (pp. 287–297).

<sup>30</sup> The reference is to "*Act. Stockh.* 1756. p. 34. t. 3."

<sup>31</sup> This name was later placed on the *Official List of Generic Names in Zoology* by *Opinion* 104. See paragraph 4 of NOTE 4 below (p. 278).

<sup>32</sup> This name was later placed on the *Official List of Generic Names in Zoology* by *Opinion* 66. See paragraph 4 of NOTE 4 below (p. 278).

<sup>33</sup> The reference is to the so-called *Iter Gotlandicum* of Linnaeus published in 1745 under the title "Oländska och Gothländska Resa förrättad år 1741."

<sup>34</sup> The name *Holothuria* Linnaeus, 1758, was later suppressed by the International Commission under their plenary powers in *Opinion* 80. See paragraph 6(i) of NOTE 4 below (p. 279).

<sup>35</sup> This name was later placed on the *Official List of Generic Names in Zoology* by *Opinion* 94. See paragraph 4 of NOTE 4 below (p. 278).

<sup>36</sup> See paragraphs 25–28 of NOTE 5 below (p. 286).

<sup>37</sup> Linnaeus cited two references: first, the 1st edition of his *Fauna svecica* published in 1746, second, vol. 1 (: 325) of the *Amoenitates Academicæ*.

<sup>38</sup> This name was later placed on the *Official List of Generic Names in Zoology* by *Opinion* 84 but with an incorrect type. See NOTE 7 below (pp. 297–302).

<sup>39</sup> See NOTE 3 below (pp. 274–277) and paragraph 7 of NOTE 4 below (pp. 279–280).

3. If the specific names in the foregoing list <sup>40</sup> are compared with other specific names used by Linnaeus, 1758, as for instance :—

p. 73.—*Equus asinus* : Linnaeus cites *Asinus* Gesn. in references ;

p. 74.—*Equus zebra* : Linnaeus cites *Zebra* in references ;

it is seen that the general plan followed by Linnaeus was to adopt older names, unless this resulted in tautonymy. As the adoption of *Equus* Gesn. as specific <sup>41</sup> name would have resulted in tautonymy, Linnaeus adopted *Equus caballus* instead.

4. This point comes out again very clearly in the case of *Volvox chaos* Linnaeus, 1758. When later—in 1767—Linnaeus used *Chaos* as generic name, he adopted “*protheus*” (i.e. *Chaos protheus* Linnaeus, 1767) to avoid using the tautonymic combination *Chaos chaos*. Linnaeus’s custom in this respect is so clear that there is no room for doubt as to his ideas in regard to the use of tautonymy.

5. Referring to Linnaeus’s Code,<sup>42</sup> the following Articles are of interest as having some bearing upon the subject :—

242. Nomen genericum antiquum antiquo generi convenit.

246. Si genus receptum, secundum jus naturae et artis, in plura dirimi debet, tum nomen antea commune manebit vulgatissime et officinali plantae.

6. It is seen that Linnaeus’s idea was to preserve names in general in their pre-binominal sense, and, had he not been opposed to tautonymy, he would undoubtedly have formed tautonymic combinations in nearly all of the cases given in the list quoted in the foregoing.<sup>43</sup> Had he done this, the question raised by Dr. Stejneger would not come up for consideration, for the genotypes would be definitely settled.<sup>44</sup>

7. The question which is now raised, therefore, brings up the point : Since Linnaeus directly avoided tautonymy, are we justified in considering the specific names in question as coming under Article 30(d) ? This Article reads as follows :—

<sup>40</sup> The names referred to are those set out in column (3) of the list in paragraph 2 above.

<sup>41</sup> For the reasons explained in footnote 7, the adjective “trivial” should have been used here instead of the adjective “specific.”

<sup>42</sup> The reference is to the Code of Botanical Nomenclature published by Linnaeus in 1751 under the title *Philosophia botanica*. Rule 242 appears on page 195 of that work and rule 246 on page 197.

<sup>43</sup> See paragraph 2 above.

<sup>44</sup> In the case here contemplated, the types of the genera concerned would have been settled automatically under rule (d) in Article 30 of the *Règles Internationales*.



- (d) If a genus, without originally designated (see (a) <sup>45</sup>) or indicated (see (b) <sup>46</sup>) type, contains among its original species one possessing the generic name as its specific or subspecific name, either as valid name or synonym, that species or subspecies becomes *ipso facto* type of the genus (type by absolute tautonymy).

8. In searching for precedents, the interesting point arises that the Nomenclatural Commission of the Botanical Club of the American Association for the Advancement of Science apparently considered a point involving a very similar principle, for in its report for 1904 ( : 256) we find the following :—

When a pre-binomial generic name is displaced by the publication of a generic name within binomial usage, the application of the displaced name to a species under the new generic name designates the type. Example.—*Dianthus* L. sp. pl. 409, a genus adopted from Tournefort with a change of his name *Caryophyllus*, is typified by *Dianthus caryophyllus*, one of the fifteen original species of Linnaeus.

9. Examining the particular case raised by Dr. Stejneger, the following points come to attention :—

- (1) The genera in question were published “ without originally designated <sup>45</sup> or indicated <sup>46</sup> type.”
- (2) The genera in question do not contain among their original species any species possessing the generic name as a *valid* specific or subspecific name.<sup>47</sup> In fact, Linnaeus carefully and consistently avoided making absolute tautonymic combinations, as may be seen from the list of cases cited in the foregoing.<sup>48</sup>
- (3) The cases in question have certain pre-binomial names cited in connection with the specific names used, and the Commission has already accepted these citations (see *Opinion* 5 <sup>49</sup>) as representing synonymic citations. Hence, it follows that the names in question are synonyms.

<sup>45</sup> The reference is to rule (a) in Article 30, the English text of which reads as follows :—

- (a) When in the original publication of a genus, one of the species is definitely designated as type, this species shall be accepted as type, regardless of any other considerations (type by original designation).

<sup>46</sup> The reference is to rule (b) in Article 30, the English text of which reads as follows :—

- (b) If in the original publication of a genus, *typicus* or *typus* is used as a *new* specific name for one of the species, such use shall be construed as “ type by original designation.”

<sup>47</sup> The names here referred to are specific and subspecific *trivial* names, *i.e.* in the cases of species, the second of the two terms constituting the “ specific name ” (= *nomen specificum*) and, in the case of subspecies, the third of the three terms constituting the “ subspecific name ” (= *nomen subspecificum*).

<sup>48</sup> The names here referred to are those set out in column (3) of the list given in paragraph 2 above.

<sup>49</sup> See pp. 115–126 above.



- (4) From the citation and from the references, it seems clear that *many* of these names are pre-binominal *specific*<sup>50</sup> names, used in the sense of "the horse," "the dog," etc. Hence, it follows that certain of the Linnean generic names in question contain among their original species "*one possessing the generic name as its specific or subspecific name, either as valid name or synonym,*" and these species in question, therefore, become, *ipso facto*, types of the respective genera, unless it be shown that some other paragraph of the Code excludes these synonyms from consideration.

10. The only paragraph which would come into consideration is found in Article 26 (see portion here italicised), which reads:—

26. The tenth edition of Linnaeus's *Systema Naturae*, 1758, is the work which inaugurated the consistent general application of binary nomenclature in zoology. *The date 1758, therefore, is accepted as the starting point of zoological nomenclature and of the Law of Priority.*<sup>51</sup>

11. This paragraph gives rise to the question whether any zoological nomenclature is recognised as existing prior to 1758. This question appears to have been settled in the affirmative in an earlier decision (see *Opinion 5*<sup>52</sup>).

12. It may, in addition, be pointed out that the views advanced in the foregoing are entirely in harmony with the views expressed in Articles 242 and 246 of the Linnean Code as quoted above.<sup>53</sup>

13. In the list of genera given in paragraph 2 above<sup>54</sup> it will be noticed that in nearly every case the genotype determined on the basis of Article 30(d) agrees with the type as generally accepted, or at least as adopted by good authority. Several cases, however, call for special consideration.

14. *Case of Simia Linnaeus*, 1758<sup>55</sup>:—At first it might appear

<sup>50</sup> See footnote 6.

<sup>51</sup> The wording of Article 26 was amended by the Eleventh International Congress of Zoology at its meeting held at Padua in 1930. The amendments then made in no way affect, however, the argument contained in paragraphs 10 and 11 of *Opinion 16*. For the text of Article 26 in its amended form and a discussion of the reasons leading to that amendment, see NOTE 3 to *Opinion 3* (pp. 98–100 above).

<sup>52</sup> See pages 115–126 above.

<sup>53</sup> See paragraph 5 of *Opinion 16* (p. 263 above).

<sup>54</sup> See pp. 259–261 above.

<sup>55</sup> The name *Simia* Linnaeus, 1758, has since been suppressed by the International Commission under their plenary powers. See paragraph 6(ii) of NOTE 4 below (p. 279) and paragraphs 2 and 3 of NOTE 5 below (p. 280).

that *Simia sylvanus* Linnaeus, 1758, should be the type of *Simia* Linnaeus, 1758, although Palmer<sup>56</sup> has adopted *Simia satyrus* Linnaeus, 1758, as type. An examination of Gesner's text shows, however, that he did not use "*Simia*" in the specific sense of "the Simia." Accordingly, this case is not disturbed by the present ruling. From Linnaeus's entry, "*Simiae veterum*," it seems clear that Linnaeus intended the generic name to follow the two species *S. satyrus* and *S. sylvanus*, and, according to Palmer, *S. satyrus* is to be accepted as type.

15. *Case of Mus Linnaeus, 1758*<sup>57</sup>:—*Mus* Linnaeus, 1758, was proposed without definitely designated type but containing, beside other species, *M. rattus* Linnaeus, 1758, and *M. musculus* Linnaeus, 1758. The Linnean rule<sup>58</sup> would indicate that the type should lie between these two species. The fact that Linnaeus cites "*Mus Gesner*" under *M. musculus* Linnaeus would seem to indicate this as type, but this interpretation is not in harmony with Palmer, 1904,<sup>59</sup> who adopts *M. rattus* Linnaeus as genotype. This particular case is disposed of<sup>60</sup> under the International Code, by Article 30 (d) and (f), in this way: Rafinesque, 1814, proposed the generic name *Musculus* Rafinesque as substitute for *Mus* Linnaeus, 1758. *Mus musculus* Linnaeus becomes type of *Musculus* Rafinesque by Article 30(d), and by Article 30(f) it thereby automatically becomes type of *Mus* Linnaeus. This is in harmony with the present ruling also.

16. *Case of Camelus Linnaeus, 1758*<sup>61</sup>:—The type, under Stejneger's proposition, is confined<sup>62</sup> to *C. dromedarius* Linnaeus, 1758, and *C. bactrianus* Linnaeus, 1758. Gloger, 1842,<sup>63</sup> divided *Camelus* Linnaeus, 1758, into (1) *Dromedarius* Gloger,<sup>64</sup> to contain

<sup>56</sup> See Palmer, 1904, *N. Amer. Fauna* 23 : 632.

<sup>57</sup> See paragraph 4 of NOTE 4 below (p. 278) and paragraphs 4 to 9 of NOTE 5 below (pp. 281-282).

<sup>58</sup> The so-called "Linnean rule" is embodied in the *Règles Internationales* as item (h) in Article 30, where it appears not as a binding rule but as a "Recommendation," compliance with which is optional. See paragraphs 25 and 26 of NOTE 5 below (p. 286).

<sup>59</sup> See Palmer, 1904, *N. Amer. Fauna* 23 : 435.

<sup>60</sup> This statement is based upon a misapprehension. See paragraph 7 of NOTE 5 below (pp. 281-282).

<sup>61</sup> The argument embodied in this paragraph is defective and was not accepted by the International Commission. See NOTE 3 below (pp. 274-277) and paragraphs 10-14 of NOTE 5 below (pp. 282-283).

<sup>62</sup> This statement is incorrect. See paragraph 10 of NOTE 5 below (p. 282).

<sup>63</sup> Though dated "1842," Gloger's work was in fact published in 1841.

<sup>64</sup> *Dromedarius* Gloger, [1841], *Handb. Naturg.* (1) : xxxiii, 134. The name *Dromedarius* Gloger, [1841], is invalid, since it is a homonym of *Dromedarius* Wagler, 1830, *Nat. Syst. Amph.* : 31.

*D. africanus* Gloger<sup>65</sup> (synonym of *Camelus dromedarius* Linnaeus, 1758) (monotype and tautonymy); and (2) *Camelus* Linnaeus, 1758, to contain *C. bactrianus* (which now becomes monotypic). According to this, unless some one prior to 1842 designated a type for *Camelus* Linnaeus, Palmer's acceptance of *C. dromedarius* Linnaeus as type (apparently on basis of Hay, 1902) is not in harmony with Article 30(g), but the action of Gloger is in harmony with the present ruling covering *Alca torda* Linnaeus, 1758.

17. *Case of Vultur Linnaeus, 1758.*<sup>66</sup>—It is shown in the foregoing list that Allen, 1907,<sup>67</sup> takes *V. gryphus* Linnaeus, 1758, as type, while the present ruling would bring up the question whether *V. papa* Linnaeus, 1758, is not the genotype. Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 86, cites "Vultur, Alb. au. 2, p. 4, t. 4.", but this citation is erroneous: Albinus does not use the word "Vultur"; the heading of the text is: "The Warworwen, or Indian Vulture," while on the plate it is "Rex Warwouwenum occidentalis—The Warwouwen."

18. *Case of Charadrius Linnaeus, 1758.*<sup>68</sup>—Comparing Gesner's original text, we find that he says: "Charadrius, ni fallor, Aristotelis haec avis est," which would appear to rule *C. oediacnemus* Linnaeus out of consideration under the present interpretation.<sup>69</sup>

19. *Case of Strix Linnaeus, 1758.*<sup>70</sup>—The case of *Strix* Linnaeus, 1758, has been the subject of considerable discussion. It appears to have been settled under Article 30(d) in 1760 by Brisson's

<sup>65</sup> *Dromedarius africanus* Gloger, 1841, *Handb. Naturg.* (1) : 134.

<sup>66</sup> See paragraph 7 of NOTE 4 below (pages 279–280) and paragraphs 15–17 of NOTE 5 below (p. 284).

<sup>67</sup> Allen, 1907, *Bull. Amer. Mus. nat. Hist.* 24 : 11.

<sup>68</sup> See paragraph 7 of NOTE 4 below (pp. 279–280) and paragraphs 18–21 of NOTE 5 below (pp. 284–285).

<sup>69</sup> When this *Opinion* was published in 1910, there followed at this point the following sentence: "The species *C. africanus*, accepted as genotype by Allen, is not one of the original species of 1758." This sentence was completely inaccurate and can only have been inserted as the result of a misreading of Allen's paper (1907, *Bull. Amer. Mus. nat. Hist.* 24 : 33); it has accordingly been omitted from the present re-issue of this *Opinion*. The sentence would have been correct if in fact Allen had said that "*C. africanus*" was the genotype of *Charadrius* Linnaeus; but he said nothing of the sort. What he said was: "*Charadrius* Linnaeus, 1758. Type, *C. apricarius* Linn., by designation of Gray in 1840." *Charadrius apricarius* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 150, was the seventh of the eleven species included by Linnaeus in the genus *Charadrius* Linnaeus, when he first published that name.

<sup>70</sup> See paragraph 7 of NOTE 4 below (pp. 279–280) and paragraphs 22–24 of NOTE 5 below (pp. 285–286).

tautonymic *Strix strix* Brisson, 1760<sup>71</sup> (= *Strix stridula* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 92).

20. From the foregoing case it is clear that a simple citation by Linnaeus of a name as "*Simia*" under *Simia sylvanus* Linnaeus or of "*Taenia*" under *Taenia vulgaris* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 820, is not sufficient justification for rejecting a generally accepted genotype on basis of the precedent of *Alca torda* Linnaeus. On the contrary, it is necessary for an author to show that the name cited by Linnaeus was used in a specific sense, as "the horse," "the dog," etc. When this can be shown, an author is justified in applying Article 30(d) to cases in which the citation of a pre-binominal specific name would have resulted in tautonymy.

21. *Case of Sepia Linnaeus, 1758.*<sup>72</sup>—If the Linnean rule 246 (see International Code, Article 30(h)) be applied, *S. officinalis* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 658, would be the type. This does not constitute a designation of type.

22. The following genera, if construed<sup>73</sup> under the present

<sup>71</sup> The question whether new generic names published by Mathurin Jacques Brisson in 1760 in the work entitled *Ornithologia sive synopsis methodica sistens Avium divisionem in ordines* should be accepted as having been published in a manner which satisfied Article 25 of the *Règles Internationales* was submitted to the International Commission on Zoological Nomenclature for decision by Dr. Ernst Hartert not long after the receipt by the Commission from Dr. L. Stejneger of the petition relating to the interpretation of rule (d) in Article 30 dealt with in *Opinion* 16. The Commission decided, as regards Dr. Hartert's petition, that new generic names in Brisson's *Ornithologia* were available under the *Règles* and this decision was embodied in *Opinion* 37 published in *Smithson. Inst. Publ.* 2013 : 87-88, which appeared in July 1911 (*i.e.* exactly twelve months after the publication of *Opinion* 16 in *Smithson. Inst. Publ.* 1938 : 31-39). Nothing was said in *Opinion* 37 to suggest that the Commission regarded as available nomenclatorially the specific trivial names used by Brisson in his *Ornithologia* and, as the argument in that *Opinion*, in so far as it is relevant to this subject, rests upon the argument used in *Opinion* 20 (which was published simultaneously and sets out the views then held by the Commission regarding the meaning of the expression "nomenclature binaire" as used in Article 25), it is to be inferred that, if the Commission had been asked to express a view on this subject, they would have held that specific trivial names first published in Brisson's *Ornithologia* (unlike generic names first published in that work) did not satisfy the requirements of Article 25. The arguments expressed by the Secretary to the Commission in paragraph 19 of *Opinion* 16 must, therefore, be regarded as being no more than the personal views of that author. For an explanation of the method of drafting adopted in *Opinion* 16 and other early *Opinions* of the Commission, see NOTE 3 to the present *Opinion* (pp. 274-277 below).

<sup>72</sup> See paragraph 4 of NOTE 4 below (p. 278) and paragraphs 25-28 of NOTE 5 below (p. 286).

<sup>73</sup> The expression "if construed under the present ruling" as here used does not mean that there is any choice whether, as respects any given name, the ruling embodied in *Opinion* 16 is to be applied to that name; it means



ruling, would seem to retain as types the same species which are accepted by good authority as genotypes, but their inclusion in this paragraph does not constitute a ruling by this Commission :—

(a) *Mammals.*

*Vespertilio* Linnaeus, 1758; *Phoca* Linnaeus, 1758; *Canis* Linnaeus, 1758; *Felis* Linnaeus, 1758; *Ursus* Linnaeus, 1758; *Sus* Linnaeus, 1758; *Talpa* Linnaeus, 1758; *Sorex* Linnaeus, 1758; *Rhinoceros* Linnaeus, 1758; *Hystrix* Linnaeus, 1758; *Lepus* Linnaeus, 1758; *Castor* Linnaeus, 1758; *Sciurus* Linnaeus, 1758; *Cervus* Linnaeus, 1758; *Ovis* Linnaeus, 1758; *Bos* Linnaeus, 1758<sup>74</sup>; *Hippopotamus* Linnaeus, 1758; *Balaena* Linnaeus, 1758; *Delphinus* Linnaeus, 1758.

(b) *Birds.*

*Strix* Linnaeus, 1758; *Corvus*<sup>75</sup> Linnaeus, 1758; *Cuculus* Linnaeus, 1758; *Merops* Linnaeus, 1758; *Upupa* Linnaeus, 1758; *Certhia* Linnaeus, 1758; *Anas* Linnaeus, 1758<sup>76</sup>; *Pelecanus* Linnaeus, 1758; *Sterna* Linnaeus, 1758; *Scolopax* Linnaeus, 1758; *Fulica* Linnaeus, 1758; *Otis* Linnaeus, 1758; *Struthio* Linnaeus, 1758; *Pavo* Linnaeus, 1758; *Meleagris* Linnaeus, 1758; *Phasianus* Linnaeus, 1758; *Tetrao* Linnaeus, 1758; *Sturnus* Linnaeus, 1758; *Loxia* Linnaeus, 1758; *Fringilla* Linnaeus, 1758; *Motacilla* Linnaeus, 1758; *Caprimulgus* Linnaeus, 1758.

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“ if, when the criteria prescribed in paragraph 20 of *Opinion* 16 are applied to any given name, it is found that that name falls within the scope of the decision embodied in that *Opinion*.”

<sup>74</sup> When this *Opinion* was published in 1910, the name *Equus* Linnaeus followed the name *Bos* Linnaeus in the list given in paragraph 22. As pointed out in NOTE 3 below (pp. 274–277), this can only have been due to inadvertence, since in the Commission's decision, as set out in the “ summary ” of this *Opinion*, a definite ruling is given regarding the type of the genus *Equus* Linnaeus. That name has accordingly now been deleted from paragraph 22.

<sup>75</sup> When *Opinion* 16 was published in 1910, this name was misspelt *Cervus* in this paragraph.

<sup>76</sup> When *Opinion* 16 was published in 1910, the name *Alca* Linnaeus followed the name *Anas* Linnaeus in the list given in paragraph 22. As pointed out in NOTE 3 below, this can only have been due to inadvertence; the error has accordingly been rectified on the present occasion by the deletion of the name *Alca* Linnaeus from this paragraph. For a parallel case, see footnote 74.

(c) *Fish.*

*Chimaera* Linnaeus, 1758; *Acipenser* Linnaeus, 1758; *Gymnotus* Linnaeus, 1758; *Stromateus* Linnaeus, 1758; *Cyclopterus* Linnaeus, 1758; *Echeneis* Linnaeus, 1758.

(d) *Invertebrates.*

*Pulex* Linnaeus, 1758; *Gordius* Linnaeus, 1758; *Holothuria* Linnaeus, 1758.<sup>77</sup>

23. The following genera, if construed<sup>73</sup> under the present ruling, would seem to take as type a species which is not accepted by certain authorities, but their inclusion in this paragraph does not constitute a ruling to the effect that the authorities in question are in error, and if any author attempts to construe the cases under the present ruling the burden of proof to show that he is justified in this procedure rests upon him:—

(a) *Mammals.*

*Simia* Linnaeus, 1758.<sup>78</sup>

(b) *Birds.*

*Vultur* Linnaeus, 1758; *Tringa* Linnaeus, 1758; *Charadrius* Linnaeus, 1758.

(c) *Invertebrates.*

*Taenia* Linnaeus, 1758.

24. It is the opinion<sup>79</sup> of the Commission that the types for the following genera are the species here cited:—

(a) *Mammals.*

*Mus* Linnaeus, 1758<sup>80</sup> (*Mus musculus* Linnaeus, 1758, by Article 30(f)); *Camelus* Linnaeus, 1758<sup>81</sup> (*Camelus bactrianus* Linnaeus, 1758, by Article 30(g)).

<sup>77</sup> This name has since been suppressed by the International Commission under their plenary powers. See paragraph 6(i) of NOTE 4 below (p. 279).

<sup>78</sup> This name has since been suppressed by the International Commission under their plenary powers. See paragraph 6(ii) of NOTE 4 below (p. 279) and paragraphs 2 and 3 of NOTE 5 below (p. 280).

<sup>79</sup> As explained in NOTE 3 below (pp. 274-277), this paragraph in the "Discussion" was not adopted by the International Commission and the statements in it do not form part of the Commission's decision.

<sup>80</sup> The type of *Mus* Linnaeus, 1758, was not settled by this paragraph, for reason indicated in footnote 79. A decision on this subject was, however, taken by the International Commission in *Opinion* 91. See paragraph 4 of NOTE 4 below (p. 278) and paragraphs 4-9 of NOTE 5 below (pp. 281-282).

<sup>81</sup> The type of *Camelus* Linnaeus, 1758, was not settled by this paragraph, for the reason indicated in footnote 79. See also paragraphs 7 and 8 of NOTE 4 below (pp. 279-280) and paragraphs 10-14 of NOTE 5 below (pp. 282-283).



(b) *Birds.*

*Alca* Linnaeus, 1758<sup>82</sup> (*Alca torda* Linnaeus, 1758, by Article 30(d)).

(c) *Invertebrates.*

*Chaos* Linnaeus, 1767<sup>83</sup> (*Chaos protheus* Linnaeus, 1767; synonym of *Volvox chaos* Linnaeus, 1758, by Article 30(d)).

25. *Opinion* written by Stiles.

26. *Opinion* concurred in by ten (10) Commissioners: Blanchard, Graff, Hoyle (*Alca*, *Mus*, *Chaos*, *Camelus*<sup>84</sup>), Jentink, Jordan,<sup>85</sup> Joubin, Monticelli (reservation<sup>86</sup>), Stejneger, Stiles, Wright.

27. *Opinion* dissented from by two (2) Commissioners: Maehrenthal,<sup>87</sup> Schulze.<sup>87</sup>

28. Not voting, three (3) Commissioners: Dautzenberg, Osborn, Studer.

## III.—NOTES BY INDIVIDUAL COMMISSIONERS.

29. Maehrenthal and Schulze say<sup>88</sup> :—

Wenn die von Linné 1758 zitierten Namen aus den Schriften von Gesner, Aldrovandi und anderen Autoren, die keine binäre Nomenklatur anwandten, Namen von Species sind, so sind sie deshalb noch keine *spezifischen*<sup>89</sup> Namen, die notwendigerweise generische Namen zur Bedingung haben. Diese von Linné zitierten Namen können daher nicht als *Synonyme* von spezifischen und subspezifischen<sup>90</sup> Namen im Sinne der binären Nomenklatur angesehen werden.

<sup>82</sup> The type of *Alca* Linnaeus, 1758, was settled by the International Commission in *Opinion* 16 through the inclusion of this name in the decision recorded in the "summary" of that *Opinion*.

<sup>83</sup> The generic name *Chaos* Linnaeus, 1767, does not fall within the scope of the decision embodied in *Opinion* 16, since its type is the binominally named species *Volvox chaos* Linnaeus, 1758, and not a pre-1758 uninominal specific name of the kind exemplified in column (3) of paragraph 2. For the reason explained in footnote 79, paragraph 24 of *Opinion* 16 does not in any way affect the status of this name. See paragraphs 7 and 8 of NOTE 4 below (pp. 279–280).

<sup>84</sup> See paragraph 5(vi) of NOTE 3 below (p. 276).

<sup>85</sup> The Commissioner here referred to is the late Commissioner David Starr Jordan not Commissioner Karl Jordan, the present President of the Commission, who at the time of the adoption of *Opinion* 16 was not a member of the Commission.

<sup>86</sup> The nature of this reservation is not recorded. See the note to subparagraph (iii) of paragraph 6 of NOTE 3 below (p. 276).

<sup>87</sup> See paragraph 29 of *Opinion* 16.

<sup>88</sup> When *Opinion* 16 was published in 1910, the following translation of the note by Commissioners Maehrenthal and Schulze was added in a footnote :—

If the names cited by Linnaeus, 1758, from the writings of Gesner, Aldrovandi, and other authors (who did not use binary nomenclature) are names of species, still they are not in consequence specific names,<sup>89</sup> which necessarily presuppose generic names as prerequisite. These names, cited by Linnaeus, cannot therefore be viewed as specific and subspecific<sup>90</sup> names in the sense of binary nomenclature.

<sup>89</sup> See footnote 7.

<sup>90</sup> See footnote 47.

**Editorial Notes by Francis Hemming, Secretary to the International Commission on Zoological Nomenclature.**

NOTE 1.

*Historical particulars.*

*Opinion* 16 was published in July 1910 (*Smithsonian Publication* 1938 : 31-39), when the Smithsonian Institution first undertook to publish the *Opinions* rendered by the International Commission on Zoological Nomenclature.

2. This *Opinion* is undated but it cannot have been adopted earlier than on some date in 1908 (the earliest date on which the earlier *Opinion* 6 can have been adopted<sup>91</sup>) or later than on some date in the first half of 1910, since (as shown above) it was published in July of that year.

3. For the reasons explained in paragraph 4<sup>92</sup> of NOTE 1 to *Opinion* 6 no manuscript or other unpublished documents relating to this *Opinion* are preserved in the archives of the International Commission on Zoological Nomenclature.

NOTE 2.

*On the limitation imposed on Opinion 16 by the amendment of Article 25 of the Règles Internationales adopted by the Tenth International Congress of Zoology at Budapest in 1927.*

In 1927, the International Commission on Zoological Nomenclature submitted a recommendation to the Tenth International Congress of Zoology at its meeting held at Budapest that Article 25 of the *Règles Internationales* should be amended by the insertion of the words "prior to 1st January 1930" at the beginning of proviso (a) and by the addition of the following new proviso (c) :—

- (c) that no generic name nor specific name published after 31st December 1930 shall have any status of availability (hence also of validity) under the rules, unless and until it is published, either :—
- (1) with a summary of characters (*seu* diagnosis; *seu* definition; *seu* condensed description) which differentiate or distinguish the genus or the species from other genera or species; or
  - (2) with a definite bibliographic reference<sup>93</sup> to such summary of

<sup>91</sup> See paragraph 2 of NOTE 1 to *Opinion* 6 (p. 132 above).

<sup>92</sup> See p. 132 above.

<sup>93</sup> For an explanation of the expression "definite bibliographic reference" as here used in Article 25, see *Opinion* 138 (1942, *Opinions and Declarations rendered by the International Commission on Zoological Nomenclature* 2 : 29-34).

characters (*seu* diagnosis; *seu* definition; *seu* condensed description); and further

- (3) in the case of a generic name, with the definite unambiguous designation of the type species (*seu* genotype; *seu* autogenotype; *seu* orthotype).

2. The above addition to the *Règles Internationales* was approved by the Tenth International Congress of Zoology and came into operation as from midnight 31st December 1930/1st January 1931 (Greenwich Mean Time).

3. As pointed out in NOTE 3 to *Opinion 1*,<sup>94</sup> the effect of the adoption of the foregoing amendment to Article 25 of the *Règles Internationales* was to impose a limitation upon the application of *Opinions* previously rendered by the International Commission on Zoological Nomenclature, interpreting Article 25 of the *Règles*. Every such *Opinion* remained valid and binding, as respects names published on or before 31st December 1930 (the last day prior to the coming into force of the Budapest amendment to Article 25), but, in so far as any such *Opinion* contained an interpretation of that Article at variance with the amended provisions adopted at Budapest, such *Opinion* ceased to be applicable in respect of any name published on or after 1st January 1931 (the date on which the Budapest amendment became operative).

4. The provision (quoted in paragraph 1 above) contained in section (3) of proviso (c) added to Article 25 at Budapest requires that, when a new generic name is published, it must, in order to be available (hence valid), be accompanied by "the definite unambiguous designation of the type species." This provision is much more rigorous than the provision contained in *Opinion 16*, which lays down a special method for use in certain cases for determining whether the type of a genus is to be regarded as having been designated by absolute tautonymy. It follows therefore (as explained in paragraph 3 above) that *Opinion 16* remains valid and binding as respects generic names published in the period from 1st January 1758<sup>95</sup> up to, and including, 31st December 1930, but it is no longer applicable as respects any generic name published after that date. It is for this reason that the words "in relation to a generic name published on, or before, 31st December 1930" have been inserted at the end of the title of *Opinion 16* and a corresponding phrase has been inserted

<sup>94</sup> See pp. 76-78 above.

<sup>95</sup> See NOTE 3 to *Opinion 3* (pp. 98-100 above) for an explanation of the reason for taking 1st January 1758 as the starting point of zoological nomenclature.

towards the end of the first sentence of the "summary" of that *Opinion*.

## NOTE 3.

*Explanation of the method of drafting adopted in the preparation of Opinion 16.*

In the period immediately following the grant by the International Congress of Zoology to the International Commission on Zoological Nomenclature of the power to render *Opinions* interpreting the *Règles Internationales de la Nomenclature Zoologique* (International Code of Zoological Nomenclature) and explaining its application in doubtful cases, the International Commission had no precedents on which to base themselves and it was necessary for them, therefore, to improvise a form of document in which to record their decisions. As was to be expected, some time elapsed before in the light of experience the International Commission came to adopt the standard form for the presentation of their *Opinions*, which in its main features is the same as that in use to-day.

2. In the first phase, which extended only for the period in which *Opinions* 1 to 5 were drafted, each *Opinion* consisted only of a "summary" and was accompanied by no explanatory matter at all. In the second phase, which began with *Opinion* 6, each *Opinion* consisted of three portions: (i) a "summary," which contained the official record of the Commission's decision; (ii) a "statement of the case," which either was prepared by the petitioner or, if the petition was a lengthy document, consisted of a summary of the petition prepared by the Secretary to the Commission or, where the petition had already been published elsewhere, of a brief reference to the published paper; and (iii) a "discussion" of the case. Attached to this "discussion," were paragraphs setting out the Secretary's recommendations to the members of the Commission, the record of the voting and, on occasion, supplementary notes attached by individual Commissioners to their votes.

3. The practice at that time was for a draft *Opinion* to be prepared by the Secretary to the Commission on the foregoing lines for the consideration of Commissioners and for the Secretary, on receiving the requisite number of votes, to add the paragraphs relating to the voting, and then to close the case with a view to its publication as an *Opinion* rendered by the Commission. Where

(as, for example, happened in *Opinions* 12 and 15) minor drafting amendments were suggested by some Commissioner at the time of voting, these were either incorporated by the Secretary in the text of the *Opinion* or, if he did not consider this practicable, were recorded at the end of the *Opinion* as suggestions which had been put forward but which for one reason or another it had not been found possible to accept.

4. The foregoing explanation of the early procedure of the Commission is necessary in order to render *Opinion* 16 intelligible, since, in the absence of such explanation, that *Opinion* would appear to contain a number of mutually contradictory statements. This is due partly to the procedure then in use and partly to the fact that certain changes were introduced into the draft of this *Opinion* in the light of the voting by Commissioners. These changes were made at the point where they were absolutely essential, namely in the "summary," which, as explained in paragraph 2 above, constitutes the official record of the Commission's decision in the case. Unfortunately, however, not all the changes were made in the paragraphs containing the "discussion" of the case, which were needed to make those paragraphs correspond with the "summary" as amended.

5. In order to understand what happened, it is necessary to note :—

- (i) that in the "summary" the two names definitely adopted by the International Commission on Zoological Nomenclature as examples of cases where the type of a genus had been fixed by absolute tautonymy through the citation in synonymy of a pre-1758 tautonymous name which had been clearly published in a univocal specific sense were :—

*Equus* Linnaeus, 1758;

*Alca* Linnaeus, 1758;

- (ii) that, notwithstanding (i) above, both the name *Equus* Linnaeus and the name *Alca* Linnaeus were included in paragraph 22 of *Opinion* 16 in a list of names as regards which it was stated that "their inclusion in this paragraph does not constitute a ruling by this Commission";
- (iii) that, notwithstanding (ii) above, the name *Alca* Linnaeus was included in paragraph 24 of *Opinion* 16 in a short list of names as respects which it was stated that "It is the



opinion of the Commission that the types for the following genera are the species here cited ”;

- (iv) that paragraph 24 of *Opinion* 16 does not contain the name *Equus* Linnaeus, although that name is the first of the two examples definitely adopted by the International Commission to illustrate the operation of the decision enunciated in that *Opinion* (see sub-paragraph (i) above); but
- (v) that paragraph 24 of *Opinion* 16 includes three names (*Mus* Linnaeus, 1758; *Camelus* Linnaeus, 1758; *Chaos* Linnaeus, 1767), which do not figure in the “summary” of the *Opinion* and are therefore not covered by the decision taken by the International Commission in this case;
- (vi) that only one Commissioner (Hoyle) is recorded as having voted in favour of the inclusion in the *Opinion* of decisions relating to particular names.

6. The conclusions to be drawn from the foregoing evidence are:—

- (i) that, as originally drafted, the “summary” either contained no examples or cited as examples the four names enumerated in paragraph 24 (*Mus* Linnaeus; *Camelus* Linnaeus; *Alca* Linnaeus; *Chaos* Linnaeus);
- (ii) that the name *Alca* Linnaeus must have been included in paragraph 22 before it was decided to include it in paragraph 24 and that, through some inadvertence, it was not deleted from paragraph 22 at the time when it was decided to include it in paragraph 24;
- (iii) that, for some reason which it is not now possible to ascertain, the proposals in paragraph 24 relating to the names *Mus* Linnaeus, *Camelus* Linnaeus and *Chaos* Linnaeus did not commend themselves to the members of the International Commission and in consequence were either not inserted in, or were deleted from, the “summary” to this *Opinion* (see sub-paragraph (i) above), but that, through some oversight, these names were not deleted from paragraph 24;

NOTE.—It is possible that the opposition to these proposals—or some of it—came from Commissioner Monticelli, who (as noted in paragraph 26 of *Opinion* 16) only agreed to that *Opinion*, subject to a reservation, the nature of which is not recorded.

- (iv) that, in the light of the votes received from Commissioners,



it was decided to insert the name *Equus* Linnaeus in the "summary," *i.e.*, in the Commission's decision, but that, through some inadvertence, that name was not at the same time deleted from paragraph 22 and inserted in paragraph 24.

7. From the practical point of view, the only point which it is of importance to note is that, notwithstanding the statements made in paragraph 24 of *Opinion* 16, no decision was taken by the International Commission in that *Opinion*, in regard to the type species of the genera *Mus* Linnaeus, 1758, *Camelus* Linnaeus, 1758, and *Chaos* Linnaeus, 1767.<sup>96</sup>

#### NOTE 4.

*The present position as regards the sixty-three generic names enumerated in paragraph 2 of Opinion 16.*

In paragraph 2 of *Opinion* 16, the International Commission on Zoological Nomenclature gave a list of sixty-three Linnean generic names as examples of cases which required study with a view to ascertaining whether the names in question fell within the terms of the decision embodied in that *Opinion*. For this purpose, it was necessary, as the Commission explained in paragraph 20 of that *Opinion*, to ascertain, for each of the names concerned, whether among its synonyms there was a pre-1758 name consisting of a single word which the original author of that name had clearly used as a uninominal (*i.e.* univocal) specific name, in the way (for example) that the word "*Equus*" was used by Gesner as a specific name in the sense of "the horse."

2. *Opinion* 16 was adopted in the period 1908-1910<sup>97</sup> and was published in 1910, *i.e.* three years before the Ninth International Congress of Zoology at its meeting at Monaco in 1913 (i) established the *Official List of Generic Names in Zoology* and (ii) conferred upon the International Commission on Zoological Nomenclature plenary powers to suspend the rules in certain cases.<sup>98</sup>

3. In the period that has elapsed since 1913, thirty-two of the generic names enumerated in paragraph 2 of *Opinion* 16 have been

<sup>96</sup> For further particulars regarding the first two of these names, see NOTE 5, paragraphs 4-9 (*Mus* Linnaeus), paragraphs 10-14 (*Camelus* Linnaeus). For the position as regards *Chaos* Linnaeus, 1767, see NOTE 4, paragraphs 7 and 8.

<sup>97</sup> See paragraph 2 of NOTE 1 above (p. 272).

<sup>98</sup> See *Declaration* 5 (pp. 31-40 above).

placed on the *Official List* and two have been suppressed by the International Commission under their plenary powers.

4. The thirty-two names which have been placed on the *Official List of Generic Names in Zoology* are the following :—

Name of genus	Number on the Official List of Generic Names in Zoology	Opinion by which the name was placed on the Official List
<i>Acipenser</i> Linnaeus, 1758 . . . . .	249	77
<i>Anas</i> Linnaeus, 1758 . . . . .	17	67
<i>Balaena</i> Linnaeus, 1758 . . . . .	224	75
<i>Bos</i> Linnaeus, 1758 . . . . .	225	75
<i>Canis</i> Linnaeus, 1758 . . . . .	390	91
<i>Capra</i> Linnaeus, 1758 . . . . .	391	91
<i>Castor</i> Linnaeus, 1758 . . . . .	226	75
<i>Cervus</i> Linnaeus, 1758 . . . . .	393	91
<i>Chimaera</i> Linnaeus, 1758 . . . . .	251	77
<i>Cyclopterus</i> Linnaeus, 1758 . . . . .	255	77
<i>Delphinus</i> Linnaeus, 1758 . . . . .	227	75
<i>Echeneis</i> Linnaeus, 1758 <sup>99</sup> . . . . .	421	92
<i>Felis</i> Linnaeus, 1758 . . . . .	402	91
<i>Gordius</i> Linnaeus, 1758 . . . . .	8	66
<i>Hippopotamus</i> Linnaeus, 1758 . . . . .	229	75
<i>Hystrix</i> Linnaeus, 1758 . . . . .	230	75
<i>Lepus</i> Linnaeus, 1758 . . . . .	405	91
<i>Mus</i> Linnaeus, 1758 <sup>100</sup> . . . . .	407	91
<i>Ovis</i> Linnaeus, 1758 . . . . .	233	75
<i>Phoca</i> Linnaeus, 1758 . . . . .	234	75
<i>Pulex</i> Linnaeus, 1758 . . . . .	530	104
<i>Sciurus</i> Linnaeus, 1758 . . . . .	417	91
<i>Sepia</i> Linnaeus, 1758 <sup>101</sup> . . . . .	461	94
<i>Silurus</i> Linnaeus, 1758 . . . . .	270	77
<i>Sorex</i> Linnaeus, 1758 . . . . .	418	91
<i>Struthio</i> Linnaeus, 1758 . . . . .	102	67
<i>Sturnus</i> Linnaeus, 1758 . . . . .	104	67
<i>Sus</i> Linnaeus, 1758 . . . . .	235	75
<i>Taenia</i> Linnaeus, 1758 <sup>99</sup> . . . . .	284	84
<i>Talpa</i> Linnaeus, 1758 . . . . .	236	75
<i>Ursus</i> Linnaeus, 1758 . . . . .	237	75
<i>Vespertilio</i> Linnaeus, 1758 . . . . .	419	91

5. In the *Opinions* cited in the last column of the table given in the preceding paragraph, the International Commission on Zoological Nomenclature in every case except two paid due regard to *Opinion* 16 and accordingly accepted as the types of the genera

<sup>99</sup> See paragraph 5 of NOTE 4 below (p. 279).

<sup>100</sup> See paragraph 15 of *Opinion* 16 (p. 266 above) and paragraphs 4–9 of NOTE 5 below (pp. 281–282).

<sup>101</sup> See paragraph 21 of *Opinion* 16 (p. 268 above) and paragraphs 25–28 of NOTE 5 below (p. 286).

concerned the species determined as such. The two exceptions were the names *Echeneis* Linnaeus, 1758, and *Taenia* Linnaeus, 1758. In each of these cases, the International Commission inadvertently failed to realise the relevance of *Opinion* 16 and cited as the type of the genus concerned a species other than that required under rule (d) in Article 30 of the *Règles Internationales* as interpreted by *Opinion* 16. The entries in the *Official List of Generic Names in Zoology* in *Opinion* 92 in regard to the name *Echeneis* Linnaeus, 1758, and in *Opinion* 84 in regard to the name *Taenia* Linnaeus, 1758, are accordingly *ultra vires* and invalid. Particulars of the remedial action proposed to be taken in regard to the name *Echeneis* Linnaeus, 1758, are given in NOTE 6 to the present *Opinion* (pp. 287–297 below). Corresponding particulars in regard to the name *Taenia* Linnaeus, 1758, are given in NOTE 7 (pp. 297–302 below).

6. The two names included in the list given in paragraph 2 of *Opinion* 16 which have since been suppressed by the International Commission under their plenary powers are :—

- (i) *Holothuria* Linnaeus, 1758, suppressed in favour of *Holothuria* Linnaeus, 1767, by *Opinion* 80, by which also *Holothuria* Linnaeus, 1767 (type: *Holothuria tremula* Linnaeus, 1767) was added to the *Official List of Generic Names in Zoology* as Name No. 273;
- (ii) *Simia* Linnaeus, 1758<sup>102</sup> (with the specific name *Simia satyrus* Linnaeus, 1758) suppressed by *Opinion* 114.

7. The twenty-nine names which were included in the list given in paragraph 2 of *Opinion* 16 but which have not since that date been considered by the International Commission on Zoological Nomenclature are :—

<i>Alca</i> Linnaeus, 1758 <sup>103</sup>	<i>Charadrius</i> Linnaeus, 1758 <sup>105</sup>
<i>Camelus</i> Linnaeus, 1758 <sup>104</sup>	<i>Corvus</i> Linnaeus, 1758
<i>Caprimulgus</i> Linnaeus, 1758	<i>Cuculus</i> Linnaeus, 1758
<i>Chaos</i> Linnaeus, 1767	<i>Equus</i> Linnaeus, 1758 <sup>103</sup>
<i>Certhia</i> Linnaeus, 1758	<i>Fringilla</i> Linnaeus, 1758

<sup>102</sup> See paragraph 14 of *Opinion* 16 and paragraphs 2 and 3 of NOTE 5 below (p. 280).

<sup>103</sup> The type of this genus is determined in *Opinion* 16. See the "summary" of *Opinion* 16 and paragraph 5 of NOTE 3 (p. 275 above).

<sup>104</sup> See paragraph 16 of *Opinion* 16 and paragraphs 10–14 of NOTE 5 below (pp. 282–283).

<sup>105</sup> See paragraph 18 of *Opinion* 16 and paragraphs 18–21 of NOTE 5 below (pp. 284–285).

<i>Fulica</i> Linnaeus, 1758	<i>Rhinoceros</i> Linnaeus, 1758
<i>Gymnotus</i> Linnaeus, 1758	<i>Scolopax</i> Linnaeus, 1758
<i>Loxia</i> Linnaeus, 1758	<i>Sterna</i> Linnaeus, 1758
<i>Meleagris</i> Linnaeus, 1758	<i>Strix</i> Linnaeus, 1758 <sup>106</sup>
<i>Merops</i> Linnaeus, 1758	<i>Stromateus</i> Linnaeus, 1758
<i>Motacilla</i> Linnaeus, 1758	<i>Tetrao</i> Linnaeus, 1758
<i>Otis</i> Linnaeus, 1758	<i>Tringa</i> Linnaeus, 1758
<i>Pavo</i> Linnaeus, 1758	<i>Upupa</i> Linnaeus, 1758
<i>Pelecanus</i> Linnaeus, 1758	<i>Vultur</i> Linnaeus, 1758 <sup>107</sup>
<i>Phasianus</i> Linnaeus, 1758	

8. It is clearly most undesirable that particular cases should be raised but left unsettled in *Opinions* rendered by the International Commission, and it is accordingly proposed that the International Commission should take the earliest practicable opportunity to reach definite decisions (i) as regards the types of each of the genera listed in paragraph 7 above, except the genera *Equus* Linnaeus, 1758, and *Alca* Linnaeus, 1758, the types of which were determined in the "summary" of *Opinion* 16, and (ii) as regards the question of placing these generic names on the *Official List of Generic Names in Zoology*.

## NOTE 5.

*The present position as regards the seven generic names discussed in paragraphs 14-19 and 21 of Opinion 16.*

In paragraphs 14-19 and 21 of *Opinion* 16 there is a discussion regarding seven of the generic names enumerated in the list given in paragraph 2 of that *Opinion*. The notes in the following paragraphs explain the present position in regard to each of these names.

(a) *Simia* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 25.

2. As pointed out in paragraph 6(ii) of NOTE 4 above,<sup>108</sup> the name *Simia* Linnaeus, 1758, was suppressed by the International Commission on Zoological Nomenclature under their plenary powers in *Opinion* 114 published on 8th June 1929.

3. The discussion of this case in paragraph 14 of *Opinion* 16 is, therefore, now of academic interest only.

<sup>106</sup> See paragraph 19 of *Opinion* 16 and paragraphs 22-24 of NOTE 5 below (pp. 285-286).

<sup>107</sup> See paragraph 17 of *Opinion* 16 and paragraphs 15-17 of NOTE 5 below (p. 284).

<sup>108</sup> See p. 279 above.

(b) *Mus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 59.

4. In the discussion contained in paragraph 15 of *Opinion* 16 attention is drawn to the fact that, if (as appeared) the circumstances in regard to the name *Mus* Linnaeus, 1758, were such as to bring that name within the scope of that *Opinion*, the type of this genus would be *Mus musculus* Linnaeus, 1758, by absolute tautonymy under rule (d) in Article 30 of the *Règles Internationales*.

5. In the same paragraph of *Opinion* 16, attention was drawn to the effect of the action taken by Rafinesque in 1814 (*Précis Somiol.* : 13; and *Principes Somiol.* : 30) when he proposed the name *Musculus* Rafinesque.<sup>109</sup> The paragraph pointed out that, where a new generic name is substituted for an older generic name and a type is designated (or indicated) for the substitute genus, that species becomes also, under rule (f) in Article 30, the type of the rejected genus.

6. In the present case, the effect of the foregoing rule in Article 30, if taken in isolation, would (as pointed out in paragraph 15 of *Opinion* 16) be to make *Mus musculus* Linnaeus, 1758 (the type of *Musculus* Rafinesque, 1814) the type also of *Mus* Linnaeus, 1758. It is of the first importance, however, to recall at this stage that it would be incorrect to read the rules contained in Article 30 independently of one another, since that Article is so drafted as to provide a series of alternatives in a descending order of priority. Thus, rule (f) of Article 30 only becomes operative in any given case if none of the rules lettered (a) to (e) is applicable to that case.<sup>110</sup>

7. It will be noted, therefore, that, while the argument regarding the type of *Mus* Linnaeus, 1758, given in paragraph 15 of *Opinion* 16 would be relevant and important if it could be shown that that genus was without a validly fixed type at the time when in 1814 Rafinesque published the name *Musculus*, that argument would be wholly irrelevant if, prior to Rafinesque's erection of *Musculus*, a type had been validly fixed for the genus *Mus* Linnaeus. Thus, the question whether rule (f) in Article 30 applies to *Mus* Linnaeus

<sup>109</sup> It should be noted that *Musculus* Rafinesque, 1814, is invalid, since it is a homonym of *Musculus* Bolten, 1798, *Mus. Bolten.* 2 : 156. The validity of the *Museum Boltenianum* is the subject of a ruling by the International Commission in *Opinion* 96 (published on 8th October 1926).

<sup>110</sup> The process to be followed in applying Article 30 of the International Code to any given case is well illustrated in the late Commissioner Stejneger's exposition of the case of *Alca* Linnaeus, 1758, in the third paragraph of the "statement of the case" which he submitted in connection with *Opinion* 16 and which is quoted in paragraph 1 of that *Opinion* (see p. 258 above).



cannot arise until a decision is reached on the question whether the prior rule (d) in that Article applies to that generic name.

8. For the reasons explained in NOTE 3 above,<sup>111</sup> paragraph 24 of *Opinion* 16 was not adopted by the Commission and accordingly nothing in that paragraph affects the status of the name *Mus* Linnaeus, 1758.

9. The generic name *Mus* Linnaeus, 1758 (type: *Mus musculus* Linnaeus, 1758) was placed on the *Official List of Generic Names in Zoology* by *Opinion* 91 as Name No. 407.<sup>112</sup> In taking this decision, the Commission accepted the view that the type of this genus was fixed by absolute tautonymy in accordance with the principle laid down in *Opinion* 16.

(c) *Camelus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 65.

10. The argument in regard to the name *Camelus* Linnaeus, 1758, set out in paragraph 16 of *Opinion* 16 is misconceived, since it rests upon two errors on questions of fact. First, the proposal submitted by Commissioner Stejneger in the case dealt with in *Opinion* 16 relates—and could only relate—to the class of case where a tautonymous pre-1758 uninominal (univerbal) specific name (in this case, the name “*Camelus*”) was cited in the synonymy of one—and only one—of the species originally included in the genus. A genus can only have one species as its type and in consequence rule (d) in Article 30 (like the other rules in that Article) can only operate where one—and one only—of the originally included species has, either as its valid name or as a synonym (either of the nominotypical or other subspecies), a name consisting of the same word as the generic name.<sup>113</sup>

11. In the present case, the tautonymous pre-1758 uninominal specific name “*Camelus*” is included among the synonyms of two of the four species included by Linnaeus in the genus *Camelus* Linnaeus, 1758, namely:—

(i) “*Camelus*” Jonstonus, *Hist. nat. Quadrup.* (“Jonst.

<sup>111</sup> See pp. 274–277 above.

<sup>112</sup> See paragraph 4 of NOTE 4 above (p. 278).

<sup>113</sup> It should be noted that in *Opinion* 18 (as modified by the amendment to Article 25 adopted by the Tenth International Congress of Zoology at Budapest in 1927) it is laid down that, as respects generic names published on, or before, 31st December 1930, it is not necessary for the purposes of rule (d) in Article 30 that the tautonymous synonym of an included species should actually be cited by the author of the genus when publishing the generic name. It is sufficient that at that date one of the included species should possess such a synonym.



quadr. t. 41"), with references also to Gesner ("Gesn. quadr. 159") and Aldrovandi ("Aldr. bis. 908") is cited as a synonym of *Camelus dromedarius* Linnaeus, 1758.

- (ii) "*Camelus*" Gesner, *Hist. Anim.* 1 (Quadrup.) ("Gesn. quadr. 1.44.f.1") with a reference to Aldrovandi ("Aldr. bis. 907") is cited as a synonym of *Camelus bactrianus* Linnaeus, 1758.

12. It will be seen, therefore, that, for the reason explained in paragraph 10 above, the principle laid down in *Opinion* 16 could not in any circumstances apply to the name *Camelus* Linnaeus, 1758, since the conditions precedent to the application of that *Opinion* to a generic name are lacking in this instance. It is for this reason that the argument in regard to the type of *Camelus* Linnaeus set out in paragraph 16 of *Opinion* 16 is misconceived, and, in consequence, so also are the conclusions there drawn from that argument. In these circumstances, it is not necessary to examine in detail the second of the errors of fact involved in paragraph 16 of *Opinion* 16, beyond observing that it derives directly from the first error in that it assumes that, for the purpose of fixing the type of the genus *Camelus* Linnaeus, it may be assumed that that genus contained only two species, whereas, in fact, it contained four species, namely the two species referred to in paragraph 11 above and *Camelus glama* Linnaeus and *Camelus pacos* Linnaeus. If *Camelus* Linnaeus had contained only two species, the argument in paragraph 16 of *Opinion* 16 drawn from *Opinion* 6 would have been correct, but, as *Camelus* Linnaeus contained more than two species, *Opinion* 6 has no application to it.<sup>114</sup>

13. For the reasons explained in NOTE 3 above,<sup>115</sup> the portion of paragraph 24 of *Opinion* 16 relating to *Camelus* Linnaeus was not adopted by the Commission and accordingly nothing in that paragraph affects the status of that generic name.

14. The name *Camelus* Linnaeus has not been considered by the International Commission since *Opinion* 16 was adopted, but in view of the fact that the status of that name was discussed, though not decided, in that *Opinion*, it is proposed that the Commission should take the earliest practicable opportunity of reaching a definite decision in regard to this name.<sup>116</sup>

<sup>114</sup> See NOTE 3 to *Opinion* 6 (pp. 134-135 above).

<sup>115</sup> See pp. 274-277 above.

<sup>116</sup> See paragraphs 7 and 8 of NOTE 4 above (pp. 279-280).

(d) *Vultur* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 86.

15. In paragraph 2 of *Opinion* 16 attention was drawn to the fact that, if the circumstances in regard to the name *Vultur* Linnaeus, 1758, were such as to bring that name within the scope of that *Opinion*, the type of this genus would be *Vultur papa* Linnaeus, 1758, through the citation by Linnaeus in 1758 of the tautonymous pre-1758 uninominal specific name "*Vultur*" ("*Alb. av.* 2. p. 4. t. 4") in the synonymy of that species. In paragraph 17 of the same *Opinion* grounds were advanced in favour of the view that the name *Vultur* Linnaeus did not fall within the scope of the decision embodied in *Opinion* 16.

16. In the latest catalogue (Peters, 1931, *Check-List Birds World* 1 : 189) support is given to the view expressed in *Opinion* 16, since the species there accepted as the type of *Vultur* Linnaeus is *Vultur gryphus* Linnaeus, 1758 (so designated by Allen, 1907, *Bull. Amer. Mus. nat. Hist.* 24 : 11) and not *Vultur papa* Linnaeus, 1758, which is accepted by Peters as the type of *Sarcoramphus* Duméril, 1806, *Zool. anal.* : 32.

17. No consideration has been given to this question by the International Commission since the publication of *Opinion* 16 and, in order to clear the matter up finally, it is proposed that the Commission should take the earliest practicable opportunity of reaching a definite decision regarding the type of this genus.<sup>116</sup>

(e) *Charadrius* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 150.

18. In paragraph 2 of *Opinion* 16 attention was drawn to the fact that if the circumstances in regard to the name *Charadrius* Linnaeus, 1758, were such as to bring that name within the scope of that *Opinion*, the type of this genus would be either *Charadrius hiaticula* Linnaeus, 1758 (because Linnaeus cited "*Charadrius* s. *Hiaticula*," attributed to Aldrovandi, Jonstonus, etc., among the synonyms of that species) or *Charadrius oedicnemus* Linnaeus (because Linnaeus cited "*Charadrius*" Gesner among the synonyms of that species). In paragraph 18 of *Opinion* 16 certain arguments were advanced against the acceptance of *C. oedicnemus* Linnaeus as the type of *Charadrius* Linnaeus.

19. The above argument is identical with that advanced in paragraph 16 of *Opinion* 16<sup>117</sup> in regard to the type of the genus

<sup>117</sup> For the text of paragraph 16 of *Opinion* 16, see page 266 above. The fallacy in the argument contained in that paragraph is discussed in paragraphs 10-13 of the present NOTE (pp. 282-283 above).

*Camelus* Linnaeus, and is based therefore on the same fallacy, namely that more than one species can be the type of a genus by absolute tautonymy or rather that, if a genus is published with three or more species and no designated type and if two of the species have trivial names that are tautonymous with the generic name, then one or other of those species must be the type, the other species placed in the genus by its original author being ineligible for selection as the type under rule (g) in Article 30.

20. The position is, therefore, that the circumstances in regard to the name *Charadrius* Linnaeus are not such as to bring that name within the scope of the decision embodied in *Opinion* 16. That *Opinion* has, therefore, no bearing upon the status of this name.

21. No consideration has been given by the International Commission to the question of the type of this genus since the publication of *Opinion* 16 and, in order to clear up the matter finally, it is proposed that the Commission should take the earliest practicable opportunity of reaching a definite decision on this question.<sup>118</sup>

(f) *Strix* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 92.

22. In paragraph 2 of *Opinion* 16 attention was drawn to the fact that, if the circumstances in regard to the name *Strix* Linnaeus, 1758, were such as to bring that name within the scope of that *Opinion*, the type of this genus would be *Strix stridula* Linnaeus, 1758, because Linnaeus cited "*Strix*" Aldrovandi ("Aldr. ornith. 561. t. 563"), etc., in the synonymy of that species. In paragraph 19 of *Opinion* 16, the view was advanced that the above species had become the type of *Strix* Linnaeus, 1758, through certain action taken by Brisson in 1760. This argument resembles that advanced in regard to the name *Mus* Linnaeus in paragraph 15 of *Opinion* 16,<sup>119</sup> since it also involves the fallacy that action taken by a subsequent author has or can have some bearing on the question of the type of a genus before it has been definitely established whether the type of that genus was either designated by its original author (under rules (a) or (b) in Article 30 of the *Règles Internationales*) or fixed by monotypy (rule (c)) or by absolute tautonymy (rule (d)). Thus, nothing

<sup>118</sup> See paragraphs 7 and 8 of NOTE 4 above (pp. 279-280).

<sup>119</sup> For the text of paragraph 15 of *Opinion* 16, see page 266 above. The fallacy in the argument used in that paragraph is discussed in paragraphs 4-9 of the present NOTE (pp. 281-282 above).

that may have been done by Brisson in 1760 can have any bearing upon what Linnaeus may have done as regards this name in 1758.

23. The position is, therefore, that it remains to be decided whether the citation of "*Strix*" Aldrovandi by Linnaeus as one of the synonyms of *Strix stridula* Linnaeus does or does not bring the name *Strix* Linnaeus within the scope of *Opinion 16*.

24. No consideration has been given by the International Commission to the question of the type of this genus since the publication of *Opinion 16* and, in order to clear up the matter finally, it is proposed that the Commission should take the earliest practicable opportunity of reaching a definite decision on this question.<sup>120</sup>

(g) *Sepia* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 658.

25. The rule propounded by Linnaeus as Rule No. 246 quoted in paragraph 5 of *Opinion 16*<sup>121</sup> is included in the International Code as item (h) in Article 30, the text of which reads as follows :—

(h) In case of Linnean genera, select as type the most common or the medicinal species (Linnean rule, 1751).

26. It must be noted that, although the above provision is lettered consecutively with the "rules" set out in Article 30, it is not, in fact, a "rule," but is one of the "Recommendations" attached to Article 30. Compliance with it is therefore purely optional.

27. The reference in paragraph 21 of *Opinion 16*<sup>122</sup> to this so-called "rule" in connection with the name *Sepia* Linnaeus was intended to be illustrative only, for the Commission made it clear (in the second sentence of that paragraph) that they were not then taking any decision regarding the type of this genus.

28. The generic name *Sepia* Linnaeus, 1758 (type: *Sepia officinalis* Linnaeus, 1758) was placed on the *Official List of Generic Names in Zoology* by *Opinion 94* as Name No. 461. In taking this decision, the Commission accepted the view that the type of this genus was fixed by absolute tautonymy in accordance with the principle laid down in *Opinion 16*.

<sup>120</sup> See paragraphs 7 and 8 of NOTE 4 above (pp. 279–280).

<sup>121</sup> See p. 263 above.

<sup>122</sup> See p. 268 above.

## NOTE 6.

*On an error, due to the non-observance of the provisions of Opinion 16, contained in the portion of Opinion 92, in which the name Echeneis Linnaeus, 1758 (Class Pisces), was placed on the Official List of Generic Names in Zoology, and on the remedial action proposed.*

In *Opinion 16*, the International Commission on Zoological Nomenclature laid it down that, where an author, in publishing a new generic name,<sup>123</sup> cites in the synonymy of one of the included species a name published prior to 1758 which is clearly a uninomial (*i.e.* univocal) specific name and which consists of the same word as the new generic name, the species for which such pre-1758 name is cited as a synonym is to be treated as being automatically the type of the new genus by absolute tautonymy under the provisions of rule (d) in Article 30<sup>124</sup> of the *Règles Internationales*.

2. In paragraph 2 of *Opinion 16*,<sup>125</sup> the International Commission gave a list of 63 generic names, the type of each of which appeared to have been fixed in the manner described above at the time when the names in question were severally published. One of the names included in the list given in paragraph 2 of *Opinion 16* was *Echeneis* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 260.

3. When the genus *Echeneis* was established in 1758, Linnaeus placed in it two species only, namely: (1) *Echeneis remora* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 260; and (2) *Echeneis naucrates* (emendation of *neucrates*<sup>126</sup>) Linnaeus, 1758, *ibid.* 1 : 261.

<sup>123</sup> As explained in NOTE 2 above (pp. 272-274), a limitation was imposed upon *Opinion 16* by the amendment to Article 25 of the *Règles Internationales* adopted by the Tenth International Congress of Zoology at Budapest in 1927. In consequence, the provisions of *Opinion 16* now apply only to names published on, or before, 31st December 1930, the last day prior to the coming into operation of the Budapest amendment to Article 25.

<sup>124</sup> It should be recalled that the rules in Article 30 operate only in succession to one another. Accordingly, rule (d) is only operative, where the type of a genus has not already been fixed either under rule (a) or under rule (b) or under rule (c). Thus, *Opinion 16* has no bearing upon the types of genera, where those types have been fixed under rules (a), (b) or (c) of Article 30.

<sup>125</sup> See pp. 258-261 above.

<sup>126</sup> The trivial name of this species was printed as "*neucrates*" in 1758 in the 10th edition of the *Systema Naturae* of Linnaeus. The spelling of this name has been correctly emended to "*naucrates*" by subsequent authors in accordance with the provisions of Article 19 of the *Règles Internationales*, which reads as follows: "L'orthographe originelle d'un nom doit être conservée, à moins qu'il ne soit évident que ce nom renferme une faute de transcription, d'orthographe ou d'impression." See NOTE 2 to *Opinion 8* (pp. 152-155 above) for a discussion of Article 19 of the *Règles Internationales*.



4. Linnaeus made four entries in the synonymy of the species *Echeneis remora* Linnaeus, 1758, the third of which was: "*Gron. mus.* I. n. 33. Echeneis." In this way Linnaeus signified that the species to which he applied the name *Echeneis remora* was the same species as that to which in 1754 Laurentius Theodorus Gronovius had referred under the name "Echeneis" in the first volume of his *Museum Ichthyologicum*. In these circumstances, the type of the genus *Echeneis* Linnaeus, 1758, is fixed automatically by *Opinion* 16, as *Echeneis remora* Linnaeus, 1758, since all the conditions laid down in that *Opinion* for the citation in synonymy of a tautonymous pre-1758 uninomial specific name are satisfied in this case. The position is, therefore, that *Echeneis remora* Linnaeus, 1758, is the type of the genus *Echeneis* Linnaeus, 1758, by absolute tautonymy under rule (d) in Article 30, as interpreted by *Opinion* 16.

5. In August 1924 Dr. C. W. Stiles, Secretary to the International Commission, issued a circular letter (C.L. 86) to all members of the Commission, in which, after referring to the proposals for the addition of a large number of names to the *Official List of Generic Names in Zoology* submitted by Commissioner Karl Apstein in 1915,<sup>127</sup> he gave particulars of the names of certain genera belonging to the Classes Amphibia, Reptilia, and Pisces, which had been included in the Apstein List and recently been re-studied by various specialists, who had reported that the names in question were valid,<sup>128</sup> that the type species had been correctly fixed in accordance with the provisions of the *Règles Internationales* and, therefore, that these names could properly be placed on the *Official List of Generic Names in Zoology*, without the use by the International Commission of their plenary powers.<sup>129</sup> The specialist by whom the names of genera belonging to the Class Pisces included in Dr. Stiles's list were stated to have been re-studied was Dr. David Starr Jordan, who was himself at that time

<sup>127</sup> The list submitted by Commissioner Karl Apstein formed the subject of discussion in the Commission's *Opinion* 74 (published in 1922 in *Smithson. misc. Coll.* 73 (No. 1) : 32-34), the "summary" of which reads as follows:—"The Commission has no power to adopt *en bloc* Apstein's list of proposed *Nomina Conservanda*, but is prepared to consider names separately upon presentation of reasonably complete evidence."

<sup>128</sup> The use of the expression "valid" in this connection is incorrect. A name is either "available" or "unavailable" under the *Règles Internationales*. The question whether an "available name" is also a "valid name" is a taxonomic, and not a nomenclatorial, question.

<sup>129</sup> For the terms of the Resolution conferring plenary powers upon the International Commission on Zoological Nomenclature to suspend the rules in certain cases, see *Declaration* 5 (pp. 31-40 above).

a member of the International Commission. Dr. Stiles added that, in view of the favourable reports received from the specialists consulted, he recommended that the generic names in question should be added to the *Official List of Generic Names in Zoology* with the type species indicated in his circular letter. In due course, nine members of the International Commission signified their concurrence in Dr. Stiles's proposals, which were thereupon adopted (by 10 votes to nil, with 7 abstentions) as *Opinion 92* of the International Commission. This *Opinion* was published in October 1926.<sup>130</sup>

6. One of the names placed on the *Official List of Generic Names in Zoology* by *Opinion 92* was *Echeneis* Linnaeus, 1758. The entry relating to this generic name in *Opinion 92* reads as follows: "*Echeneis* Linn., 1758a, 260, type *E. naucrates* Linn., 1758a, 261."

7. No particulars were given in *Opinion 92* regarding the manner in which the types of the genera there enumerated had been determined (*i.e.* whether by original designation, monotypy, absolute tautonymy, or subsequent selection). In the case of the names of genera belonging to the Class Pisces, there is, however, the following note in the circular letter referred to in paragraph 5 above: "For data by Dr. Jordan see THE GENERA OF FISHES, Jordan and Evermann, 1917a." Reference to the above work (Jordan & Evermann, 1917, *Genera Fishes* (1) : 12) shows that the name *Echeneis* Linnaeus was there dealt with as follows:—

*Echeneis* Linnaeus, 260, after Artedi; type ECHENEIS NAUCRATES L. (misprinted NEUCRATES).

First restriction by Gill, *Proc. Acad. Nat. Sci. Phila.*, 1862, 239. In 1864, *loc. cit.* 60, Gill proposed to adopt as type ECHENEIS REMORA, this being the only species noted by Artedi, and in Linnaeus's earlier writings. But as Linnaeus referred both species to ECHENEIS, this change seems not warranted.

8. The points which it is important to note are the following:—

(i) In 1917, Jordan and Evermann:—

- (a) gave no consideration to the question of the applicability of *Opinion 16* to the generic name *Echeneis* Linnaeus, 1758, notwithstanding the fact that in *Opinion 16* the International Commission on Zoological Nomenclature had indicated that there were *prima facie* grounds for considering that *Echeneis remora* Linnaeus, 1758, was the type of that genus by absolute tautonymy;

<sup>130</sup> *Opinion 92* was published in 1926, *Smithson. misc. Coll.* 73 (No. 4) : 3-4.

- (b) disregarded the action of Gill (1864) in selecting *Echeneis remora* Linnaeus, 1758, as the type of *Echeneis* Linnaeus, 1758; and
  - (c) adopted *Echeneis naucrates*<sup>131</sup> Linnaeus, 1758, as the type of *Echeneis* Linnaeus, 1758.
- (ii) When in the period 1924-1926 the question of placing the name *Echeneis* Linnaeus, 1758, upon the *Official List of Generic Names in Zoology* was under consideration, the conclusions reached by Jordan and Evermann in 1917 were not re-examined by the International Commission. In consequence, no consideration was given to the question whether the provisions of *Opinion 16* applied to the generic name *Echeneis* Linnaeus, 1758, and, therefore, whether under the *Règles Internationales* the type of this genus was *Echeneis remora* Linnaeus, 1758, and not *Echeneis naucrates*<sup>131</sup> Linnaeus, 1758, as concluded by Jordan and Evermann in 1917.

9. It is most unfortunate that the question of the applicability of *Opinion 16* to *Echeneis* Linnaeus, 1758, was not considered by the International Commission at the time when *Opinion 92* was in preparation, since the failure to do so has had the result that in that *Opinion* the International Commission, when placing the name *Echeneis* Linnaeus, 1758, on the *Official List of Generic Names in Zoology*, erroneously stated that the type of that genus was *Echeneis naucrates*<sup>131</sup> Linnaeus, 1758, whereas, in fact (as shown in paragraph 4 above), *Echeneis remora* Linnaeus, 1758, is the type of that genus by absolute tautonymy under rule (d) in Article 30 as interpreted by *Opinion 16*.

10. The decisions embodied in *Opinion 92* were not taken by the International Commission under their plenary powers,<sup>132</sup> and in consequence nothing in that *Opinion* can have the effect of inserting in the *Official List of Generic Names in Zoology* an entry which is contrary to the provisions of the *Règles Internationales*. Accordingly, the portion of *Opinion 92* which states that *Echeneis naucrates*<sup>131</sup> Linnaeus, 1758, is the type of *Echeneis* Linnaeus, 1758, is *ultra vires* and therefore invalid.

11. It is clearly essential that, when, as on the present occasion, an error on a question of fact is detected in an *Opinion* rendered by the International Commission, the earliest possible opportunity

<sup>131</sup> See footnote 126.

<sup>132</sup> See footnote 129.

should be taken to rectify the error so detected. In the present case there are two courses of action, either of which it is open to the International Commission to take, namely :—

(1) to render an *Opinion* cancelling the entry in *Opinion* 92 relating to the generic name *Echeneis* Linnaeus, 1758, and substituting therefor an amended entry placing that name on the *Official List of Generic Names in Zoology* with *Echeneis remora* Linnaeus, 1758, as type by absolute tautonymy under rule (d) in Article 30 of the *Règles Internationales*, as interpreted by *Opinion* 16 ;

OR

(2) to render an *Opinion* under the Commission's plenary powers <sup>133</sup> (a) cancelling the designation of *Echeneis remora* Linnaeus, 1758, as the type of *Echeneis* Linnaeus, 1758, and (b) specifying *Echeneis naucrates* <sup>134</sup> Linnaeus, 1758, as the type of that genus.

12. Course (1) above is clearly the proper course to adopt, unless it can be shown that the strict application of the *Règles Internationales* in the case of the name *Echeneis* Linnaeus, 1758, will clearly result in greater confusion than uniformity, in which event Course (2) would be the proper course to follow. Only specialists in the Class Pisces are in a position to furnish the International Commission with the material necessary to enable them to form a conclusion on the question whether confusion rather than uniformity would clearly result from the strict application of the *Règles* in this case through the acceptance of *Echeneis remora* Linnaeus, 1758, as the type of the genus *Echeneis* Linnaeus, 1758, and therefore whether or not the *Règles* should be suspended in this case in order to validate existing practice by specifying *Echeneis naucrates* <sup>134</sup> Linnaeus, 1758, as type of this genus.

13. It was in 1944 that I first discovered the mistake in *Opinion* 92 in regard to the type of the genus *Echeneis* Linnaeus, 1758, while I was engaged in an examination of the subsequent history of the numerous generic names, of which the status is discussed in *Opinion* 16 but on which no decision was taken in that *Opinion*. On making this discovery, I thought it well to obtain preliminary advice from leading ichthyologists on the question whether this was a case in which the *Règles* should be allowed to take their course and existing practice should be set aside through the

<sup>133</sup> See footnote 129.

<sup>134</sup> See footnote 126.

recognition of *Echeneis remora* Linnaeus, 1758, as the type of the genus *Echeneis* Linnaeus, 1758, or whether, in the view of the specialists consulted, the prospect of confusion arising from the adoption of that course was such as to justify the use by the International Commission of their plenary powers for the purpose of designating *Echeneis naucrates* Linnaeus, 1758, as the type of the genus *Echeneis* Linnaeus, 1758. In putting the case before the specialists concerned, I drew attention also to the fact according to the latest Nomenclator (Neave, 1940, *Nomencl. zool.* 4 : 21) the name *Remora* Gill, 1862, *Proc. Acad. nat. Sci. Philad.* 1862 : 239 (the name of the genus to which the species *Echeneis remora* Linnaeus, 1758, is commonly referred) is a homonym (1) of *Remora* Gouan, 1770, *Hist. Pisc.* 10, 183, and (2) of *Remora* Forster, 1771, *Cat. Anim. N. Amer.* : 20. I accordingly asked the specialists concerned, when replying to the main question which I had put to them, to indicate also their views on the question whether the name *Remora* Gill, 1862, was an available name or whether it was, as then appeared probable, an invalid homonym under Article 34 of the *Règles Internationales*.

14. The following are the replies received from the three specialists consulted :—

- (a) *Views of Dr. Ethelwynn Trewavas, Department of Zoology, British Museum (Natural History), London*  
(letter dated 24th October 1944)

Unfortunately, the library being evacuated, I cannot go into the *Echeneis-Remora* question as I should. But I think it is right to say that the use now of *Echeneis remora* Linnaeus, 1758, as the type of *Echeneis* Linnaeus, 1758, would cause confusion.

*Remora* Gill, 1862,<sup>135</sup> is not a homonym, as, according to the writers whom I have consulted, the first two authors listed by Neave in his *Nomenclator zoologicus* (Gouan, 1770, and Forster, 1771) used it in the same sense as have later authors, *i.e.* with *Echeneis remora* Linnaeus as type by absolute tautonymy. If it is possible, I hope that a decision may be postponed until the library is available again, as I have not been able to consult either Gouan or Forster.

<sup>135</sup> The volume of the *Proc. Acad. nat. Sci. Philad.* in which the name *Remora* Gill was published has no volume number. It is the volume for the year 1862 and should therefore be cited as *Proc. Acad. nat. Sci. Philad.* 1862. It was published in Parts, like similar journals, and the dates of publication of the several Parts are given at the foot of the page on each signature. The signature in which the name *Remora* Gill appears is dated "April 1862." The title page of the volume was published after the close of 1862 and is dated "1863." This is no doubt the reason why the name *Remora* Gill is inadvertently treated in the latest Nomenclator (Neave 1940, *Nomencl. zool.* 4 : 21) as having been published in 1863.



(b) *Views of Dr. C. M. Breder, Jr., Department of Fishes, American Museum of Natural History, New York*  
(letter dated 29th November 1944)

I have studied your statement concerning the status of the type of the genus *Echeneis* Linnaeus, 1758. In cases of this sort which involve the inversion of established generic names I believe that true "confusion" as opposed to mere "inconvenience" is the inevitable resultant effect. Consequently I recommend that the appropriate action be taken to firmly establish *Echeneis naucrates* Linnaeus, 1758, as the type of *Echeneis* Linnaeus.

Due to the press of other matters I have not been able to look up Gill, 1862, but I do not believe that any treatment of his would change my view concerning the inadvisability of permitting *Echeneis remora* Linnaeus, 1758, to become properly established as the type of *Echeneis*.

(c) *Views of Dr. Leonard P. Schultz, Dr. Samuel F. Hildebrand and Dr. Robert R. Miller, United States National Museum, Washington, D.C.*

(letter from Dr. Leonard P. Schultz dated 1st December 1944)

Your letter of November 16th concerning the genera *Echeneis* and *Remora* arrived on the 29th, and, after considerable investigation, I have come to certain conclusions which are explained below.

*Echeneis* Linnaeus, 1758, has two species listed in the following order: (1) *E. remora*, and (2) *E. neucrates*.<sup>136</sup> After, 1758, *E. remora* was listed by very numerous authors and the vernacular name—*Remora*—was used many times both for *E. remora* and *E. neucrates* and, no doubt, for other species of this group of fishes.

The next question is when was the genus *Remora* established and the genus *Echeneis* first restricted?

Neave (*Nomenclator Zoologicus*, vol. 4, p. 21, 1940) cites *Remora* Gouan, 1770 (*Hist. Pisc.*, p. 10, [107], 183) but, in looking this up, I find that the left-hand page 183 is in Latin and the generic name *Echeneis* is used, whereas the right-hand page (also numbered 183) is the French translation of the opposite page 183 and the name used is "Le Remora." No species is cited anywhere. Thus, in my opinion, "*Remora*" was not used generically in 1770.

Forster, 1771, *A Catalogue of the Animals of North America* . . . (reprint of 1882 examined by me) has three columns throughout. The column on the left-hand side of each page gives a common name preceded by a Roman number and on page 6 this series of numbers has over it the name "Genus." The second column also contains common or vernacular names, breaking down further the common name in the left-hand column. The third column usually (but not always) contains a Latin binomial name, as for example:—

XIV.	Cod	**	Jugular
		Common	ib.
		Frost	<i>Gadus callarias</i> Mus. Bl.
		Tau	<i>Gadus</i> Tau
XVIII.	Remora	***	Thoracic
		Remora	<i>Ech. neucrates</i> C.II. 26

Thus, I conclude that *Remora* is not used in the binomial sense but only as a common name by Forster, 1771 and 1882.

<sup>136</sup> See footnote 126.

I have searched the literature and can find no generic use of *Remora* previous to that of Gill (April 1862, *Proc. Acad. Nat. Sci. Philadelphia*, p. 239). Gill revised the "family of Echeineidoidae," giving a key to the various genera, some new, citing the genotype for each, as, for example, in my reprint of his article:—

*Echeneis* <sup>137</sup> (*E. naucrates* L.)

*Remora* <sup>138</sup> (*E. remora* L.)

Thus Gill, 1862, not only established the genus *Remora*, but also restricted the genus *Echeneis* L. to the species *E. naucrates* L. Further, he was the first reviser and, in addition, his genus *Remora* has but a single species cited,<sup>137</sup> that is, *E. remora* L., which is tautotypic for *Remora*.

The next binomial use of *Remora* appears to be that of Bleeker (September 1863, *Onzième Notice sur la Faune Ichthyologique de l'Île de Ternate*). On page 9 of my reprint the name is used as "279. *Remora albescens* Gill = *Echeneis albescens* Schl."

Gill (March 1864,<sup>139</sup> *Proc. Acad. Nat. Sci. Philadelphia*, pp. 59–60) reversed himself in regard to the genotypes of both *Echeneis* and *Remora* when he published the following:—

Elevating these types with others to independent generic rank, I have restricted *Echeneis* to the genus typified by *E. naucrates* and called that one typified by *E. remora*, *Remora*, which name Dr. Bleeker has since accepted. On examining the works of Linnaeus and Artedi, I find, however, that *E. remora* was the only species referred to that genus by Linnaeus in the earlier editions of the *Systema Naturae*, and by Artedi; and that in the later editions, Linnaeus placed that species at the head of the genus. The *E. remora* must consequently be regarded as the type of the genus, and a new name (*Leptecheneis*) conferred on *E. naucrates*. The genera of Echeineidoidae will then be known by the following names:

<sup>137</sup> (a) Gill's action here described fulfils all the conditions laid down in *Opinion* 6 (pp. 127–138 above). Accordingly, if no type had previously been designated or selected for the genus *Echeneis* Linnaeus, 1758, Gill's action on this occasion would constitute a valid selection of *Echeneis naucrates* (emend. of *neucrates*) Linnaeus, 1758, as the type of the genus *Echeneis* Linnaeus.

(b) Although the name *Remora* was published by Gill in 1862 without a description or definition, it is a nomenclatorially available name, since the genus is monotypical and the name *Remora* Gill, 1862, was, therefore, published with an "indication" (as defined by *Opinion* 1 (see pp. 73–86 above)) and accordingly satisfies the requirements of Article 25 of the *Règles Internationales*.

<sup>138</sup> As Gill designated *Echeneis remora* Linnaeus, 1758, as the type of the genus *Remora* Gill, 1862, that species is automatically the type of that genus under rule (a) in Article 30 of the *Règles Internationales*. The specific trivial name (*remora*) is the same word as that which constitutes the name of the genus (*Remora*), and this fact would make that species the type of *Remora* Gill by absolute tautonymy under rule (d) of Article 30, if the type of that genus had not previously been fixed in some other manner. In this connection, it must be recalled that the rules set out in Article 30 are not rules which operate independently of one another but on the contrary are rules which operate only in succession to one another in a diminishing order of priority. Accordingly, in the present case, the type of the genus *Remora* Gill, 1862, is *Echeneis remora* Linnaeus, 1758, through the operation of rule (a) in Article 30 (type by original designation). In these circumstances, the later rule (d) in the same Article has no applicability to the generic name *Remora* Gill, 1862.

<sup>139</sup> This volume of the *Proc. Acad. nat. Sci. Philad.* was issued without a volume number and with the dates of publication of the several Parts printed at the foot of each signature in the same way as the volume for 1862 discussed in footnote 135.

## REMORAE

*Echeneis remora* L.

1. *Echeneis* L., *Art.* Type, *Echeneis remora* L.<sup>140</sup>
2. *Remoropsis* Gill. Type, *Echeneis brachyptera* Lowe.
3. *Rhombochirus* Gill. Type, *Echeneis osteochir* Cuv.
4. *Remilegia* Gill. Type, *Echeneis australis* Bennett = *Echeneis scutata* Günther.

## LEPTECHENEIDES

5. *Leptecheneis* Gill. Type, *Echeneis neucrates* L.
6. *Phtheirichthys* Gill. Type, *Echeneis lineatus* Menzies.

The current use of the two genera is almost universal among present-day ichthyologists, most of whom have completely ignored *Opinion* 16 and have followed Gill and *Opinion* 92. Listed below are a few works of importance that recognize both genera (*Echeneis* and *Remora*) with the genotypes as given :

Jordan, Evermann, and Clark, Check List of Fishes—North America—, Rept. U.S. Comm. Fish., 1928, Pt. 2, p. 448, 1930 (*Echeneis* L., type *E. naucrates*<sup>141</sup> L.); (*Remora* Forster, type *E. remora* L.)

Meek and Hildebrand, Marine Fishes of Panama, vol. 3, p. 896, 1928 (*Echeneis* L., type *E. naucrates*<sup>141</sup> L.); (*Remora* Forster, type *E. remora* L.)

Fowler, Marine Fishes of West Africa, vol. 2, pp. 1018, 1021, 1936 (*Remora* Forster, type *E. remora* L.); (*Echeneis* L. type *E. neucrates*<sup>141</sup> L.)

Schultz, U.S. Nat. Mus. Bull. 180, pp. 259, 260, 1943 (*Echeneis* L., type *E. naucrates*<sup>141</sup> L.); (*Remora* Forster, type *E. remora* L.)

L. S. Berg (Classification of Fishes both Recent and Fossil, *Travaux Inst. Zool. Acad. Sci. URSS*, vol. 5, Pt. 2, p. 495, 1940) recognized both genera, *Echeneis* and *Remora*.

My conclusions are that both genera should be recognized and that *Remora* dates from Gill, 1862, and not from Forster, 1771, or Gouan, 1770. It is clear that the genotypes are those named by Gill, 1862,<sup>142</sup> who, as stated heretofore, was the first reviser and the first to restrict the genus *Echeneis* L. To change the genotypes from those designated by Gill, 1862, would result in *actual confusion*. They should stand as currently used by ichthyologists—*Remora* Gill, 1862 (type *E. remora* L.) and *Echeneis* L. (type *E. neucrates* L.).

Dr. Samuel F. Hildebrand and Dr. Robert R. Miller, both actively engaged in systematic ichthyology here at the United States National Museum, concur in the opinions stated above.

<sup>140</sup> For the reason explained in footnote 137, Gill's action in 1862 would have constituted a valid selection of *Echeneis naucrates* Linnaeus, 1758, as the type of the genus *Echeneis* Linnaeus, 1758, if it had not been for the fact that *Echeneis remora* Linnaeus, 1758, had been the type of that genus from the date of its original publication (1758) by absolute tautonymy under rule (d) in Article 30 as interpreted by *Opinion* 16. In no circumstances, therefore, could Gill's action in 1864 in selecting *Echeneis remora* Linnaeus as the type of *Echeneis* Linnaeus have had any power to reverse or set aside the selection by the same author in 1862 of *Echeneis naucrates* Linnaeus as the type of this genus. For the reasons explained above, Gill's action in 1862 was invalid, because through the operation of rule (d) in Article 30 and *Opinion* 16 the type of the genus *Echeneis* Linnaeus had always been *Echeneis remora* Linnaeus. By a pure accident, therefore, the statement by Gill in 1864 that *Echeneis remora* Linnaeus is the type of this genus happens to correspond correctly with the actual position under the *Règles Internationales* but this is not due in any way to the action then taken by Gill.

<sup>141</sup> See footnote 126.

<sup>142</sup> See footnotes 137(a) and 138.

15. In view of the unanimous nature of the advice received from the specialists consulted, a clear *prima facie* case has been established in support of the view that the strict application of the *Règles* in the case of the name *Echeneis* Linnaeus, 1758 (*i.e.* the acceptance of *Echeneis remora* Linnaeus, 1758, as the type of *Echeneis* Linnaeus, 1758, by absolute tautonymy under rule (d) in Article 30 of the *Règles Internationales*, as interpreted by *Opinion* 16) would clearly result in greater confusion than uniformity. It follows, therefore, that the course best calculated to promote stability in the nomenclature of the Order Discocephali in the Class Pisces would be for the International Commission on Zoological Nomenclature to use their plenary powers in order to validate the (at present) erroneous entry in *Opinion* 92 in regard to the type of *Echeneis* Linnaeus, 1758, thereby validating also the current practice of specialists in the group concerned. For this purpose, it would be necessary for the International Commission (i) to set aside the designation of *Echeneis remora* Linnaeus, 1758, as the type of *Echeneis* Linnaeus, 1758, by absolute tautonymy and (ii) to designate *Echeneis naucrates* (emend. of *neucrates*) Linnaeus, 1758, as the type of this genus.

16. Further, I agree with the view expressed by Drs. Schultz, Hildebrand and Miller that, if the foregoing action is to be taken in regard to the name *Echeneis* Linnaeus, 1758, it is desirable that at the same time action should be taken by the International Commission on Zoological Nomenclature to dispose of the outstanding points in regard to the name *Remora*. In view of the evidence brought forward, it seems to me that the most satisfactory course would be for the International Commission to suppress under their plenary powers all uses of the name *Remora* as a generic name prior to the publication of the generic name *Remora* Gill, 1862, *Proc. Acad. nat. Sci. Philad.* 1862 : 239. The name *Remora* Gill, 1862 (type by original designation<sup>143</sup> : *Echeneis remora* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1 : 260) could then be added to the *Official List of Generic Names in Zoology*.

17. The proposal which will, therefore, be submitted to the International Commission on Zoological Nomenclature is that they should render an *Opinion* under their plenary powers in the following terms :—

Under suspension of the *Règles*, it is hereby declared as follows :—(i) all type designations for *Echeneis* Linnaeus,

<sup>143</sup> See footnote 138.



1758, made prior to the date of this *Opinion* are set aside; (ii) *Echeneis naucrates* (emendation of *neucrates*) Linnaeus, 1758, is designated as the type of *Echeneis* Linnaeus, 1758; (iii) the name *Remora* as used by A. Gouan, 1770, by J. R. Forster, 1771, and by any other prior to the publication of the name *Remora* Gill, 1862, is suppressed; and (iv) the name *Remora* Gill, 1862 (type by original designation<sup>143</sup>: *Echeneis remora* Linnaeus, 1758) is validated. The entry in *Opinion* 92 relating to the name *Echeneis* Linnaeus, 1758, is accordingly confirmed and the name *Remora* Gill, 1862 (Class Pisces, Order Discocephali), with the type specified above, is hereby added to the *Official List of Generic Names in Zoology* as Name No. —.

## NOTE 7.

*On an error, due to the non-observance of the provisions of Opinion 16, contained in the portion of Opinion 84, in which the name Taenia Linnaeus, 1758 (Class Cestoidea), was placed on the Official List of Generic Names in Zoology and on the remedial action proposed.*

The problem of the generic name *Taenia* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1: 819, is essentially similar to that of the name *Echeneis* Linnaeus, 1758, discussed in the preceding NOTE.<sup>144</sup> In each case the generic name is expressly cited by the Commission in *Opinion* 16 as a name which *prima facie* falls within the ambit of that *Opinion* and therefore as the name of a genus, the type of which is (and has been, under the *Règles Internationales*, since the date of its publication) automatically determined by absolute tautonymy under rule (d) in Article 30 of the *Règles*. In each case reference to the original description shows that a pre-1758 univocal specific name consisting of the same word as the generic name employed for the species by Linnaeus was cited by that author in the synonymy of one of the included species in his original description of the genus and therefore that the conditions laid down by the Commission in *Opinion* 16 apply absolutely to the generic name in question. In each case the Commission in a later *Opinion* placed the generic name in question on the *Official List of Generic Names in Zoology* without giving any consideration to the question of the applicability to the generic name of the provisions of *Opinion* 16, notwithstanding the fact that special attention had

<sup>144</sup> See NOTE 6 to the present *Opinion* (pp. 287–297 above).



been drawn by them to that name in that *Opinion*. In each case the species cited as the type of the genus in the *Opinion* placing the generic name on the *Official List* was not the species which under rule (d) in Article 30 of the *Règles*, as interpreted by *Opinion* 16, is automatically the type of the genus by absolute tautonymy. In each case the *Opinion* in which the generic name was placed on the *Official List* was an *Opinion* rendered by the Commission under their ordinary powers and not under suspension of the *Règles*. Accordingly, in each case, the validity of the entries on the *Official List* there recorded depends solely upon those entries being in accordance with the provisions of the *Règles*. In each case (as shown above) the entry relating to the generic name in question does not comply with the provisions of the *Règles* and is, therefore, erroneous and invalid. Thus, in each case immediate remedial action by the Commission is required in order to prevent confusion from arising.

2. The position as regards the generic name *Taenia* Linnaeus, 1758, is set out in the following paragraphs.

3. The genus *Taenia* was established by Linnaeus in 1758 with four included species, namely :—

1. *Taenia solium* Linnaeus ( : 819)
2. *Taenia vulgaris* Linnaeus ( : 820)
3. *Taenia lata* Linnaeus ( : 820)
4. *Taenia canina* Linnaeus ( : 820)

4. In the synonymy of the second of the above species, *Taenia vulgaris* Linnaeus, 1758, the third and seventh entries are as follows :—

*Schenk. obs.* III. p. 408. *Taenia*.

*Bewerw. thes.* 202. t. 202. f. *Taenia*.

5. The above citations by Linnaeus of the pre-1758 univocal specific name " *Taenia* " as a synonym of one of the originally included species (*Taenia vulgaris* Linnaeus, 1758) satisfies all the requirements laid down in *Opinion* 16. Accordingly, the species *Taenia vulgaris* Linnaeus, 1758, is the type of the genus *Taenia* Linnaeus, 1758, by absolute tautonymy under rule (d) in Article 30 of the *Règles Internationales*, as interpreted by *Opinion* 16.

6. In *Opinion* 84 published in 1925,<sup>145</sup> the Commission placed on the *Official List of Generic Names in Zoology* the names of nine

<sup>145</sup> See 1925, *Smithson. misc. Coll.* 73 (3) : 11-12.

genera, of which the eighth was *Taenia* Linnaeus, 1758. This *Opinion* contained no discussion of the circumstances in which the cited species had become the types of the genera concerned or any evidence that this matter had been investigated by the Commission after the proposal had been submitted to them for approval.<sup>146</sup> Particulars were, however, given in the *Opinion* of the steps which had been taken to bring to the attention of specialists the proposal that the names of the nine genera referred to above and of certain other allied genera should be added to the *Official List* and it was explained that every name to which any exception had been taken had been deleted from the list submitted for approval. Accordingly, the nine generic names included in *Opinion* 84, the sole survivors of this process of scrutiny, were the only names which all the specialists consulted were agreed in thinking it was desirable should be placed on the *Official List* with the species there specified as their types. The evidence so summarised is of great importance as showing the widespread and universal desire of specialists that the name *Taenia* Linnaeus, 1758, should be placed on the *Official List* with *Taenia solium* Linnaeus, 1758, as type, but it throws no light whatever on the question whether in fact that species is the type of the genus *Taenia* Linnaeus under the *Règles Internationales*.

7. The actual entry in *Opinion* 84 in regard to this generic name was as follows :—

*Taenia* Linnaeus, 1758a, 810–820, type *solium* (in *Homo*; Europe).

8. Long before the publication of *Opinion* 84 in 1925, the

<sup>146</sup> The surviving records relating to *Opinion* 84 are preserved in the archives of the International Commission on Zoological Nomenclature in the series of records bound under the title "*Correspondence relating to Opinions rendered*," volume 3 (*Opinions* 82–89). These records show that on 6th March 1916 a Circular Letter (C.L. 25) was issued by the Secretary to the Commission containing the draft of an *Opinion*, which then bore the number "68." The first eight paragraphs of this draft *Opinion* were in exactly the same terms as the first eight paragraphs of *Opinion* 84 as finally adopted but the ninth paragraph contained proposals for the addition of 17 generic names to the *Official List*. The voting papers show that the admission of 8 of these names in the *Official List* was objected to by one or more members of the International Commission. Accordingly, at the close of the voting, the Secretary to the Commission withdrew the proposals in regard to these 8 names, thereby securing unanimity in the Commission in favour of the admission to the *Official List* of the remaining 9 names. The entries in the Circular Letter relating to these generic names were identical with those later published in *Opinion* 84. It is clear, therefore, that, when the Commission were invited to place the name *Taenia* Linnaeus, 1758, on the *Official List* with *Taenia solium* Linnaeus, 1758, as type, their attention was not drawn to the bearing of *Opinion* 16 on this problem.

species *Taenia solium* Linnaeus, 1758, was widely accepted as the type of the genus *Taenia* Linnaeus, 1758, that species having been so specified by Braun <sup>147</sup> in 1900 (*in Bronn's Klassen u. Ordnungen des Thier-Reichs* 4 : 1720), when Braun wrote :—" *Taenia* L. . . . Typische Art : *Taenia solium* L."

9. Nevertheless, as is now clear,<sup>148</sup> the type of *Taenia* Linnaeus, 1758, is, and always has been, under the *Règles Internationales* the species *Taenia vulgaris* Linnaeus, 1758, by absolute tautonymy, for, as is expressly stated in the opening words to Article 30 of the *Règles Internationales*, the rules embodied in that Article are to be applied one after the other in the order of precedence there set out.<sup>149</sup> Accordingly, rule (d), under which *Taenia vulgaris* Linnaeus, 1758, is fixed as the type of *Taenia* Linnaeus, 1758, by absolute tautonymy, takes precedence of rule (g) (type by subsequent designation), under which *Taenia solium* Linnaeus, 1758, was selected as the type of this genus by Braun in 1900 and Braun's action is therefore invalid, the type of this genus having already been determined under rule (d).<sup>150</sup>

10. The species *Taenia vulgaris* Linnaeus, 1758, is today identified with the third of the species placed in the genus *Taenia* by Linnaeus in 1758, namely *Taenia lata* Linnaeus, 1758, and is commonly referred to by the specific trivial name *lata* Linnaeus, 1758. This species has been widely referred to the genus *Dibothriocephalus* Luehe, 1899, *Verh. dtsh. zool. Ges.* (9) 1899 : 46, and accordingly treated of under the name *Dibothriocephalus latus* (Linnaeus, 1758).<sup>151</sup> It has also been regarded as belonging to the genus *Diphyllobothrium* Cobbold, 1858, *Trans. linn. Soc. Lond.* 22 : 166 and treated of under the name *Diphyllobothrium latum* (Linnaeus, 1758).<sup>152</sup>

<sup>147</sup> As will be seen from paragraph 2 of *Opinion* 16 (p. 258 above), Braun was there cited as having first selected *Taenia solium* Linnaeus as the type of *Taenia* Linnaeus.

<sup>148</sup> See paragraph 5 of the present NOTE.

<sup>149</sup> The actual wording employed in the opening words of Article 30 of the *Règles Internationales* is as follows :—" The designation of type species of genera shall be governed by the following rules ((a)-(g)), applied in the following order of precedence :—"

<sup>150</sup> Rule (g) in Article 30 contains the statement that a type designation made thereunder by a subsequent author " is not subject to change," but it is hardly necessary to point out that this declaration applies only to the types of genera, to which rule (g) is applicable, *i.e.* to genera, the types of which are not determined by any of the previous rules, *i.e.* rules (a) to (f).

<sup>151</sup> See Stiles & Hassall, 1912, *Bull. U.S. hyg. Lab.* 85 : 194 (*Index-Cat. med. vet. Zool.* (Cestoda & Cestodaria)).

<sup>152</sup> *Teste* Baylis (H. A.) *in litt.* (25th May 1945).

11. The position is therefore as follows :—

- (i) that, if the *Règles Internationales* are strictly applied to the generic name *Taenia* Linnaeus, 1758, it will be necessary to transfer this generic name from *Taenia solium* Linnaeus, 1758, and allied species, now universally referred thereto, to *Taenia lata* Linnaeus, 1758, and allied species, which have become widely known under the generic name *Dibothriocephalus* Luehe, 1899; and
- (ii) to place *Taenia solium* Linnaeus, 1758, and its allies in a genus having some entirely unaccustomed name.

12. It cannot be doubted that confusion rather than uniformity would result from the transfer, on purely nomenclatorial grounds, of the generic name *Taenia* Linnaeus, 1758, from its accustomed position as the name of the genus for *Taenia solium* Linnaeus, 1758, to become the name of the genus hitherto known as *Dibothriocephalus* Luehe, 1899, or *Diphyllobothrium* Cobbold, 1858. Moreover, even if it could be shown that specialists in the systematics of the group concerned were in general willing to accept such a transformation of the meaning to be attached to the generic name *Taenia* Linnaeus, it would still be necessary for the International Commission to take into account wider aspects of the problem, for it is one which affects not only systematists but also, for example, the teachers of zoology, for the name *Taenia* Linnaeus as the generic name for the Common Tape-Worm of Man appears in every text-book of zoology.

13. When in 1913 the International Congress of Zoology conferred plenary powers upon the International Commission on Zoological Nomenclature to suspend the *Règles Internationales* as applied to any given case, where, in the judgment of the Commission, the strict application of the *Règles* as applied to that case, would clearly result in greater confusion than uniformity, they expressly stated in Article 3 of the Plenary Powers Resolution<sup>153</sup> that the authority which they then conferred upon the Commission "refers in the first instance and especially to . . . the transference of names from one genus or species to another."

14. For the foregoing reasons, it seems plain that the proper course is for the International Commission now to make use of their plenary powers to suspend the *Règles* for *Taenia* Linnaeus, 1758, for the purpose of fixing irrevocably the species *Taenia*

<sup>153</sup> See Declaration 5 (1943, *Opinions and Declarations rendered by the International Commission on Zoological Nomenclature* 1 : 31-40).

*solium* Linnaeus, 1758, as the type of this genus, thereby (i) preventing the confusion which would arise from the strict application of the *Règles Internationales* to this case, and (ii) giving valid force to the portion of *Opinion* 84, in which the name *Taenia* Linnaeus, 1758, was added to the *Official List of Generic Names in Zoology* with *Taenia solium* Linnaeus, 1758, as its type. A proposal to this effect will be formally submitted to the International Commission as soon as possible.

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## THE PUBLICATIONS OF THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE.

(obtainable at the Publications Office of the International Trust for Zoological Nomenclature at 41, Queen's Gate, London, S.W. 7.)

### Opinions and Declarations rendered by the International Commission on Zoological Nomenclature.

The above work is being published in three volumes concurrently, namely :—

*Volume 1.* This volume will contain *Declarations* 1-9 (which have never previously been published) and *Opinions* 1-133 (the original issue of which is now out of print). In order that the volume, when bound, may be of a convenient size for handling, it has been decided to divide it into a series of Sections, which will be continuously paged but will each be supplied with a title page and index. It is at present contemplated that the first of these Sections (Section A) will comprise *Declarations* 1-9 and *Opinions* 1-16. Part 17 containing the index and title page for Section A will be published as soon as possible. The publication of Parts of Section B will be started immediately thereafter.

Parts 1-25 (comprising *Declarations* 1-9 and *Opinions* 1-16) have now been published. Further Parts are in the press and will be published as soon as possible.

*Volume 2.* This volume will contain *Declarations* 10-12 and *Opinions* 134-181 and will thus be a complete record of all the decisions taken by the International Commission on Zoological Nomenclature at their meeting held at Lisbon in 1935. This volume will be published in two Sections, which will be continuously paged but will each be supplied with a title page and index.

Section A, comprising *Declarations* 10-12 and *Opinions* 134-160 (published in Parts 1-30 and 30 A), is now complete, price £4 4s. *od.* Individual Parts of this Section are also obtainable separately at the prices at which they were originally published.

Section B will comprise *Opinions* 161-181 (to be published in Parts 31-52). Parts 31-51 (containing *Opinions* 161-181) have already been published and Part 52 containing the index and title page is now in the press.

*Volume 3.* This volume, which commenced with *Opinion 182*, will contain the first instalment of the *Opinions* adopted by the International Commission since their Lisbon meeting. Parts 1-13 (containing *Opinions 182-194*) have now been published. Further Parts will be published as soon as possible.

### **Bulletin of Zoological Nomenclature.**

This journal was established by the International Commission on Zoological Nomenclature in 1943 as their Official Organ in order to provide a medium for the publication of:—

- (a) proposals on zoological nomenclature submitted to the International Commission for deliberation and decision;
- (b) comments received from, and correspondence by the Secretary with, zoologists on proposals published in the *Bulletin* under (a) above; and
- (c) papers on nomenclatorial implications of developments in taxonomic theory and practice.

Parts 1-10 of volume 1 have now been published. Further Parts are in the press and will be published as soon as possible.